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THE #1 INTERACTIVE ENTERTAINMENT MAGAZINE

GUIDED TOUR
Top Gun
Flight Sim for the Masses?

Entertainment Online!

Full-Motion VIDEO
COMES OF AGE!

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GUN RATE

48 Multimedia & Game Reviews

September 1995
$5.99   Canada $6.99

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L FIRE

FUEL TOTAL

MERLIN

ID : F-14 Tomcat

Smoke me a kipper.

22627 47890

PUMPS 1 GALLON A MINUTE.

Fig. 34.—The Human Heart.

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What's Up!

Spectrum HoloByte's new Top Gun flight sim aims to be tough enough for experts, yet easy and fun enough for everyone else. See our Guided Tour on page 54.

ILLUSTRATION COURTESY OF SPECTRUM HOLOBYTE

Features

COVER STORY

GUIDED TOUR

Full-motion video is blurring the line between movies and games. Find out if that's a really good thing on page 42.

Compaq's Presario CDTV 978 looks great inside and out. Page 22.

Emergency Broadcast Network brings experimental multimedia weirdness to your computer. Page 24.

EBN

3-D polygonal fighting action lands on the PC in FX Fighter, page 60.

Virtual Pool lets you practice your trick shots without getting chalk on your hands, page 72.

Conrad, hero of Flashback, will get fleshed out in Fade To Black, page 62.

Electronic entertainment®

VOLUME 2, NUMBER 9

Tech Shop

You may write lefty, but most joysticks make you shoot righty. Learn how to switch on page 84.

AMERICA Online

IN THE SPOTLIGHT
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KIDS ONLY

September 1995

Total Control

Quick, you have to make a choice. Which do you really want: full-motion video, or full control over everything that happens in your favorite computer games and multimedia titles?

Tough choice? Maybe. Maybe not.

As assistant editor Bill Meyer makes clear in "Is It a Movie, Or Is It a Game?" (page 42), all the processing power of modern PCs, the sophisticated video-acceleration hardware and software, and the fancy compression algorithms simply aren't enough to meld realistic video with the kind of complete interactivity available in animated games.

With current—or even currently foreseeable—video technology, the best we can hope for is to switch among video clips at predefined points. And it's prohibitively expensive and complicated to shoot, digitize, and array every possible action that could result from a given situation.

Most of today's audience for computer entertainment has made peace with this compromise. But the general public—those not weaned on Nintendo and Sega, anyway—has been led by the mass media to expect some slick interactive-television experience that will let them make Jerry Seinfeld do whatever they dictate. When consumers see the current state of the art, many of them feel cheated. They aren't interested in tiny, fuzzy video clips that basically play through by themselves. Who would be? And they're not willing to trade the spittin' image of Harrison Ford for some pixelated sprite or cartoonish animation, even if they can make Harry do their bidding.

So what'll it be: Damned if you do or damned if you don't? Well, maybe we're going about this all wrong. Most of the new crop of movie-style games concentrate on integrating real video into the games. In the long run, though, it probably makes more sense to improve computer-animation techniques to the point where they begin to resemble reality. That way, committed gamers get the interaction they crave, while more casual fans can enjoy the TV-like production values they've come to expect.

Some of this is already possible with relatively simple objects like airplanes and spaceships (see associate editor Steve Klett's Guided Tour of Spectrum HoloByte's new Top Gun: Fire at Will flight simulator on page 54). But the real test involves creating realistic people, especially faces. Most of the attempts to make animated faces are embarrassingly unconvincing. But higher-powered computers, new software tools, and innovative techniques that texture-map bits of video faces onto 3-D heads are getting better and better. New graphics-acceleration hardware may even allow game developers to map real video of actors' faces onto fully interactive "puppets" that users would be able to control far beyond the limits of conventional video.

Perfecting this process will finally solve the video/interactivity conundrum. Instead of choosing one or the other, you'll get something that passes for both—animated, fully controllable action that looks like real video. It may take a while, but only that accomplishment will mark the full maturity of computer entertainment.

Tell me what you think! Send e-mail to fpaul@iftw.com; fax me at 415-349-7482; or send snail mail to Editor, Electronic Entertainment, 951 Mariner's Island Blvd., Suite 700, San Mateo, CA 94404.

Letters

By Far the Best

I have been reading your magazine since its early beginnings. You guys have really done a great job of keeping readers aware of changes, advancements, and new technology within the computer industry. On top of that, you have kept us well informed about new software with your in-depth reviews. E^2 has done a fine job of alerting consumers about the numerous new products so they can make an educated decision on what to purchase.

E^2 is by far the best and most informative multimedia magazine in the industry. People are starting to take notice. All I can say is keep up the good work. Thanks again.

Timothy W. Puckett
DeKalb, IL

Nice Work If You Can Get It

I have to say that I love your magazine and that I've subscribed since its first issue. I know that everyone who writes says that, but I mean it.

I have one suggestion. I think you could use a section devoted to game cheats and hints.

Also, I'd like to get some information about becoming a game tester for some of the larger game companies, such as id Software and LucasArts. I know that some testers don't get paid, but I don't really care. I just want to be involved in game testing. I'd really appreciate any help you can give me.

Dyani Kuehn
Mayville, WI

Keep an eye out for cheats and/or hints in just about every game review we publish. In addition, we post some hot cheats each month in our Game News section.

As for becoming a tester, you should directly contact the companies you're interested in testing games for. Be warned that it's not an easy position to obtain. Paid testing jobs are highly sought. Just getting on the testing list is tough, as many companies tightly control the early release of software to minimize piracy and industrial espionage. —Ed.

bps B.S.

Why doesn't id Software make multiplayer versions of Doom or Doom II for 2,400-bps modems? I really hate the fact that most network games require 9,600-bps modems. Is there any way I can get around buying a faster modem and still play multiplayer Doom?

Eric Beeson
Bristol, TN

Afraid not. More complex games need to send lots of data across the wire. Slower modems simply can't move this data fast enough. 9,600 bps seems to be the minimum anyone wants to work with these days, and you can bet that 14.4- and 28.8-Kbps models will become the standard soon. If you really want to play games over a modem, you'd better consider upgrading to a V.32bis or V.34 modem. You can find such modems for as little as $100 if you shop around. —Ed.

Earthsiege Expertise

I purchased MetalTech: Earthsiege by Sierra On-Line in April. I am interested in becoming an Earthsiege expert. If there is information on hint books or strategies, please notify me. I already wrote to Sierra, but they directed me to you.

Ethan Gyles
New Ipswich, NH

Experts, eh? Well, practice makes perfect. But if you want even more insider info, give Infotainment World Books, a division of E^2's parent company, a call at 800-360-2228 and ask them about their Official Players Guide to Earthsiege ($18.95). If you have access to an online service such as America Online, check out the PC gaming forums for more Earthsiege info. —Ed.

Size Matters

I recently read the preview of Lost Eden in your May issue. The first tip in your tip box says, "If you have something in your inventory you don't want, give it to Tug." My friend and I noticed that his name is not

Tug, it's Thugg.

Also, in future reviews can you give the average length of time it takes to complete each game. We finished Lost Eden in a couple of hours the first day we got it.

Ryan Stef
Ventura, CA

Sorry about the typo, er, typo. We'll try to do better.

As for game length, our reviewers usually note games that are particularly short and easy—or long and difficult—in the text of the story, as John Sauer did in his preview of Lost Eden. Estimating hours of game play is a bit tricky, though, because a less-experienced gamer may take far longer to finish a game than an expert would. Besides, if you play a game as a team, you can expect game play to be shorter. —Ed.

100 Percent Accurate

I'd like to start by saying I love your magazine. Your software and hardware reviews are always 100 percent accurate. Continue the great work.

I would like to know if LucasArts is making a second expansion disk for TIE Fighter. Second, are you going to print a review of Sierra's Space Quest 6 soon? I've played the demo, and it looks interesting in a warped sort of way. Still, I would like to read a review before I buy it. Thanks!

Robert Winkeler
Bartelso, IL

Thanks for the support. Watch for LucasArts' TIE Fighter Collector's CD-ROM in the fall, featuring a new campaign with 232 missions. Look for our review of Space Quest 6 in the October issue. —Ed.

Got something you want to get off your chest? Do it! Write, fax, or e-mail us at: Letters to the Editor, c/o Electronic Entertainment, 951 Mariner's Island Blvd., Suite 700, San Mateo, CA 94404; fax: 415-349-7781; Internet address, e2Letters@iftw.com; and CompuServe: 73361,265.

COMING SOON!

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PC CD ROM

I was passing through a wasteland when suddenly my mind drifted . . .

VIRTUAL BOY

Inside the VATICAN with Sir Peter Ustinov

City of Pope

E ver wondered what the Pontiff sees when he strolls around his neighborhood? Jasmine Multimedia will give you a glimpse **Inside the Vatican**, scheduled to coincide with Pope John Paul II's fall visit to the U.S. The two-disc set is based on the six-hour TV series of the same name and features rare footage of hundreds of paintings in the Vatican's

vast collection.

Hosted by Sir Peter Ustinov, Inside the Vatican lets you tour the papal city and uncover the roots of the Roman Catholic Church by journeying back to Israel, Turkey, and finally to Italy. There are "interviews" with historic figures (played by actors) whose lives helped shape the Church's development, along with re-enactments of key events from the time of Peter the Apostle to the present. Whether you're pious or just curious, Inside the Vatican offers a rare look behind the scenes at St. Peter's house of worship. (Jasmine Multimedia; 800-798-7535; $89.95) — *Ann M. Marcus*

Platform: Win CD
Available: Fall

Now you don't have to lie on your back to enjoy the Sistine Chapel's ceiling.

Heavenly Bodies

A s dazzling as the supernovas she studies, Dr. Fiorella Terenzi brings her musical talent and training in astrophysics to **Invisible Universe**, an upcoming CD-ROM for Windows and Mac from Voyager.

Described by comedian Dennis Miller as a cross between Carl Sagan and Madonna, Terenzi has pioneered the art of creating music from the radio waves coming from distant galaxies. Invisible Universe includes a full hour of Terenzi's haunting music; poems by scientists, astronauts, and celebrities, including Herbie Hancock, Thomas Dolby, and Timothy Leary; and more than 45 minutes of video and animation about galactic phenomena such as black holes, giant nebula, and even the origin of the universe itself. You can also look at classical maps of the night sky that are linked to the latest photographs and scientific data from observatories around the world.

If the notion of radio waves from outer space intrigues you, tune in to Invisible Universe. (Voyager; 800-446-2001; $39.95) — *Ann M. Marcus*

Astrophysicist and musician Dr. Fiorella Terenzi takes World Beat to the next level.

Platform: Win/Mac CD
Available: Fall

De Do Do Do, De Dah Dah Dah

B assist, singer, pop idol, actor, and now multimedian? That would be **Sting**, the former Policeman, who will be releasing a fully interactive CD-ROM titled **All This Time** later this year.

The project is a collaboration between Starwave—which adds the platinum-selling Englishman to a roster of interactive poster boys that includes Peter Gabriel, Clint Eastwood, and the Muppets—and A&M Records, Sting's longtime label.

The disc will contain video footage and interviews with the star himself and will also include interactive graphics, lyrics, and discography information. You'll also find previously unreleased music tracks. Starwave says that, as with all of its CD-ROM projects, the artist has full creative input into all facets of development. Look for All This Time in time for Christmas. (Starwave; 206-957-2000, http://www.starwave.com; not yet priced) — *Donald St. John*

Platform: Win/Mac CD
Available: Late 1995

It's a lot easier to create virtual reality in a movie than in real life. But that doesn't mean that Hollywood always gets it right. Let's take a moment to reflect on some of the many misconceptions of virtual reality in popular culture over the years.

Movies

Brainstorm, 1983
Natalie Wood, Christopher Walken

Natalie Wood's last role, but virtual reality's debut on the silver screen. A research scientist played by Christopher Walken creates a headset-like "sensory experience device" that falls into the wrong hands.

The Lawnmower Man, 1992
Pierce Brosnan, John Fahey

Happy village idiot Jobe Smith (Fahey) garners a bigger brain, develops a mean set of pectorals, and finally gets lucky, thanks to Dr. Lawrence Angelo's (Brosnan) prescription of drugs and computer-generated virtual reality.

Demolition Man, 1993
Sylvester Stallone, Wesley Snipes, Sandra Bullock

In futuristic "San Angeles," folks have simulated sex via VR headsets—the real thing is too messy and taboo. Unfortunately, Stallone's and Bullock's characters are nostalgic for the old ways.

Disclosure, 1994
Michael Douglas, Demi Moore

Sexual harassment and virtual reality go hand in hand as seductress Meredith Johnson (Moore) turns Tom Sanders (Douglas) into her boy toy via VR.

Johnny Mnemonic, 1995
Keanu Reeves, Dina Meyer

Reeves, who has more presence then acting acumen, enters virtual reality to connect with the Internet of tomorrow and download his head's precious cargo. Oh, and to save the world, too. (See Finishing Moves for a list of cargo, page 100.)

Television

Star Trek: The Next Generation, 1989
Paramount

Tired of hearing "Make it so" from that patronizing Picard? Take a break in the Holodeck. This fantasy's for you.

Amazing (Aerosmith Music Video), 1993
MTV

Just boot up the old computer system, throw on your VR headset and gloves, and you can live out every 16-year-old's fantasy of a big bike and the girl next door. Just don't spill your Coke on the keyboard.

Mad About You's Paul Reiser lives out his Christie Brinkley fantasy via virtual reality.

Mad About You, 1994
NBC

In the wacky world of marriage '90s style, virtual reality spices up the Buchmans' love life. He (Paul Reiser) gets Christie Brinkley and she (Helen Hunt) goes a round with Andre Agassi. Unfortunately, for the fans who called in to locate the device, this virtual reality happens only on prime time.

VR.5, 1995
Fox

Enjoy some cyber-voyeurism as hacker and VR aficionado Lori Singer uses her headset and woefully outdated 1200-baud acoustic-coupler modem to surf the 'Net and drop in on other users' minds. Sounds great: Too bad it got canceled.

—*Bill Meyer*

The Future is in Their Hands

■ Estimated number of children in the U.S with access to home PCs today: **13.7 million**

■ Estimated number of children in the U.S. with access to home PCs by the year 2000: **30.4 million**

■ Estimated number of 18-year-olds today who have grown up using home PCs: **520,000**

■ Estimated number of 18-year-olds in the year 2005 who will have grown up using home PCs: **1.57 million**

Source: U.S. Bureau of the Census, Forrester Research, Inc.

Kon-Tiki Sails Again

Remember Thor Heyerdahl? The fascinating explorer's seafaring adventures will be available on CD-ROM this fall in Kon-Tiki Interactive from Gyldendal, a Norwegian publishing company.

Heyerdahl spent a lifetime trying to prove his theories on the population paths of the Pacific Ocean. He defied both nature and science to sail from Peru to Polynesia on a balsa raft, the Kon-Tiki.

Thor Heyerdahl took to the high seas on a balsa raft.

Kon-Tiki Interactive's video of Heyerdahl's voyages recreates the experience of sailing across the ocean on wooden rafts and reed ships, traveling ancient trade routes along the Tigris River, or taking part in excavations of rare Peruvian treasures at the pyramids at Tucume. (Gyldendal; phone: 47 22 034100; email: svein.therkelsen@gyldendal.no; $49)

—*Ann M. Marcus*

Platform: Win CD **Available:** November

news FLASH

■ **Major League Baseball** made in interactive TV debut on the struggling Interactive Network. Now the big leagues are trying again: They've partnered with **NTN Communications** to develop **DiamondBall**, which lets players predict the outcome of an at-bat, answer strategy questions, and predict the success of a particular batter. The system was scheduled to go live at the All-Star Game in July over NTN's iTV network, which mainly services bars, restaurants, and hotel lounges throughout the United States. NTN developed the service in collaboration with Hall of Fame pitcher **Rollie Fingers**; a new agreement with restaurant chain TGI Fridays Inc. for interactive gaming may give NTN the boost it needs.

■ Two of the country's most prominent magazines have joined the online gold rush. **Rolling Stone** inaugurated a forum on CompuServe this summer, while this month, **Newsweek** launches **Virtual City**, a cyberspace-lifestyle newsstand magazine that will include online areas on Prodigy and the Internet.

■ Don't quite know how to find that popular Netscape Navigator browser everyone's been talking about? Don't fret. Netscape has bundled it into the **Netscape Navigator Personal Edition**, the company's first foray into the retail business. The package includes pathways to Internet accounts with four national providers (Netcom, Portal, MCI Internet, and UUNET). The company says it takes just five min-

CyberHOT   Movie Mania   CyberNOT

With the summer's cinema sizzlers still commanding long lines at theaters and the new crop of fall releases already on the playbill, this full house of World Wide Web pages devoted to the silver screen. (For more ideas, see reviews of sites devoted to *Batman Forever* and *The Net* in Wirehead on page 38.) Just like the movies themselves, some of these offerings are blockbusters and others are bombs.

The Basketball Diaries
http://underground.net/BDiaries/ Good info about the underrated movie, but the real treat here is the sound clips of author/protagonist Jim Carroll reading from his work. The real thing.

Apollo 13
http://www.mca.com/universal_pictures/apollo13/index.html We don't think Tom Hanks will land a third Academy Award for this one, but the site is a winner.

Blade Runner
http://kzsu.stanford.edu/uwi/br/offworld.html One of the movies' most enduring sci-fi visions gets a fan-created Web page that links to everything *Blade Runner*-related.

Tales From the Crypt Presents Demon Knight
http://www.mca.com/universal_pictures/tales/crypt.html Cool creepy stuff in 3-D.

Pocahontas
http://www.disney.com/BVPM/PressRoom/Pocahontas/Pocahontas.html You might be sick of the Native American Princess by now, but your kids aren't.

The Basketball Diaries
http://cybertimes.com/NewLine/basketball/basketball.html Everything a film company page shouldn't be. Offering up only the movie poster isn't enough, guys. This site fouls out.

Mortal Kombat
http://www.directnet.com/kombatbegins/shang/shang.html Let's face it, interactive is better than passive. Play the arcade game, forget the movie.

Congo
http://voyager.paramount.com/Congo.html Much ado about a thoroughly dull movie. Kudos for coverage of endangered mountain gorillas, though.

First Knight
http://www.mca.com/Pictures/Sony Movies/16knight.html Is anybody else having trouble buying Richard Gere as Sir Lancelot of the Round Table?

Johnny Mnemonic
http://www.mca.com/Pictures/Sony Movies/07multi.html More hype about a truly underwhelming movie. You're better off with the CD-ROM game.

—Compiled by Donald St. John

Slim Pickings

Virtual music used to mean throwing on your favorite album, dancing around the room, and doing some screaming bends on your air guitar. Last year, Ahead tried to improve on the concept with its Virtual Guitar, a $110 plastic axe that hooked up to your computer. But the pricey instrument didn't exactly leave music fans dancing in the streets (see Sharp Edge, September 1994, page 9).

This year, Ahead has simplified the concept. **VPick** is an oversized guitar pick that attaches to your serial or parallel port. Then, instead of risking an amputation on the Virtual Guitar's razor blade-like strings, you just

Take your VPick

grab a tennis racket and strum the catgut to the Allman Brothers Band's "Whipping Post" (on Ahead's game Quest For Fame Starring Aerosmith)

Seem silly? Well, sure, but at $14.95, the VPick is inexpensive enough to hit the right chord with consumers.

Ahead also has new games in the works based on country, classical, and folk music that will support the VPick. In the meantime, look for the VPick to be bundled with Quest For Fame. (Ahead; 800-872-7827; $14.95, $59.95 with Quest For Fame)   *–Bill Meyer*

Platform: Win CD/Mac CD
Available: September

TIME
STANDS
STILL

STAR TALK

with Mike Ditka

For years, Mike Ditka has been one of the living legends of football—first as an All-Pro tight end, then as a Super Bowl-winning coach, and now as a tough-talking NBC analyst. Already a computer-game veteran, Ditka has joined up with Digital Pictures to produce **Quarterback Attack,** a full-motion-video-based computer game due out this fall. Electronic Entertainment's Donald St. John chatted with the coach about electronic football.

Electronic Entertainment: Apart from the video, how does Quarterback Attack differ from your first game (Accolade's Mike Ditka Ultimate Football)?

Mike Ditka: There's more interactivity in this one. The player becomes the quarterback, the person I'm interacting with constantly during the game—giving 'em hell at times, patting 'em on the back at times. They'll really get a sense of what it's like to be in the game and be dealing with me as their coach.

EE: So if the player goes three and out, they're going to go to the sidelines and catch hell from you?

Ditka: Right. I might be a little sarcastic and say, "Hey, rook, it's not like you thought it was gonna be, eh?!"—something I'd never do in real life. I don't particularly try to come across as a nice guy in this game.

EE: So if your line breaks down, you're going to see some 280-pound behemoth lying on top of you.

Ditka: Exactly.

EE: I understand you used real players when you shot the footage for the game.

Ditka: Yeah, we did...some were high school athletes, some were actors who looked like football players, but I knew they weren't 'cause they were too smart. A lot of them had played football, though. They simulated the game and the sideline situations extremely well.

EE: Can someone who watches football on Sunday, but doesn't necessarily know all the formations, still enjoy this game?

Ditka: Absolutely. We don't get into the technicalities at all.

EE: But then how do you engage the hardy fan?

Ditka: Because the player has the option of doing different things. You have to call the right plays and then execute them flawlessly to succeed. There is some strategy involved. But let's be honest: Football is not brain surgery.

EE: So, do you have any predictions for the upcoming real football season?

Ditka: Yeah, I do. The 49ers are gonna beat the New England Patriots in the Super Bowl.

Card-iology

Remember the thrill of opening a fresh package of baseball cards, chomping the brittle bubble gum as you sorted out the duplicates from the new issues? DiscUs Sports hopes to give that feeling an electronic boost with **The Official Major League Baseball Guide to Trading Cards,** due out in early 1996.

The CD-ROM will catalog all there is to know about saving and collecting baseball cards—and about the players themselves. Famous players, such as Joe Garagiola, talk about their favorite cards and their best seasons, while video clips highlight the plays. The big collectors show off their caches. Find out where to buy rare cards and how to preserve them. The Card History documents the evolution of card art over time. Just for fun, morph your face onto a card or play the 500-card trivia game. Do you know Mickey Mantle's lifetime batting average? (DiscUs; 800-303-4800; less than $20)   —*Ann M. Marcus*

Put your knowledge of baseball-card trivia to the test.

Platform: Win CD, Mac CD   **Available:** Early 1996

Roger Zelazny and Jane Lindskold's

CHRONOMASTER

Time stands still! Thousands of lives are at stake!
Join Horda, the Chronomaster, in this epic quest for vengeance in a future where magic & science co-exist. This ground-breaking Graphic Adventure will take you on a journey through man-made pocket universes full of cyborgs, pirates & witches. Can you guide Horda & use his bottled time to solve the mystery, re-start the universes and return justice to the stars?

"Roger Zelazny: the finest writer of his generation in science fiction."
—George R.R. Martin

"Dreamforge Intertainment has been one of the most successful CRPG design groups to have appeared..."
Steve Wartofsky,
Strategy Plus

> Challenging puzzles and non-linear plots with multiple solutions and varied endings.

> Striking, highly detailed and fully rendered 3D artwork and full motion animation. Fully digitized voices and original soundtrack.

> Boundless gameplay as players move freely from screen to screen within pocket universes in any order they choose.

IBM CD-ROM

Capstone
THE PINNACLE OF
ENTERTAINMENT SOFTWARE

DEVELOPED BY

DreamForge

INTRACORP

INTERNET The New Cafe Society @

I f you're primed for your entree into Internet cafe society, then check into two new hot spots in New York City's grungy but cool East Village. Fast earning the moniker "Silicon Village," the neighborhood plays host to a pair of hip new gathering places for the so-called Downtown Digerati. Both establishments offer e-mail addresses and can help you create your own home page on the Internet's World Wide Web. These wired watering holes also rent and sell CD-ROM titles, sponsor various art and cultural events, and (surprise!) serve java and other chic comestibles.

The 2,500 sq. ft. **@cafe**, which makes its home in a former hippie haven on St. Mark's Place, boasts a full bar, an eclectic menu, and more than 15 different computers linked to the Internet with superfast T1 access. Peopled by smart young Generation X types, the brick-walled @cafe offers its own web site (http://fly.net) and CU-SeeMe technology that

lets patrons use the computers for impromptu videoconferencing. (@cafe; 12 St. Mark's Place, NYC; 212-979-5439; info@fly.net)

Down a few blocks on 3rd St., the smaller and quieter **Internet Cafe** shares a block with the New York chapter of the Hell's Angels. The Cafe's edibles are limited to coffee and desserts, but the menu does boast printing and scanning services. This more-intimate establishment has five terminals hooked up to its high-speed 56Kbps line, plus plenty of connections for patrons who bring their own laptops.

Stop by New York's Internet Cafe for a byte or a bite.

You can also buy paperback books and magazines. Visit the cafe's web site at http://www.bigmagic.com. (Internet Cafe; 82 E. 3rd St., NYC; 212-614-0747)

For more information on digital cafes around the world, log onto http://www.easynet.co.uk/pages/cafe/ccafe.htm or the alt.cybercafes newsgroup.

—*Fredric Paul*

The Face of Fame

T he caricatures of 92-year-old artist Al Hirschfeld have immortalized many of the 20th century's top Broadway and Hollywood entertainers. His definitive character sketches have appeared for decades in the pages of *The New York Times* and other publications.

Now, Jasmine Multimedia will immortalize the artist himself—and his work—on CD-ROM with **Hirschfeld: The Great Entertainers.** The Windows disc will include the master's hilarious and insightful renderings of Marilyn Monroe, Charlie Chaplin, The Beatles, Madonna, and more than a thousand others. And the title's clever morphing feature flows the drawings seamlessly from one to another. Hirschfeld even helped design the product's interface.

There will also be in-depth interviews with Hirschfeld and his daughter, Nina, whose name is hidden in every one of her father's drawings. See if you can find them all.

In addition to the standard release, Jasmine will also create a numbered, limited-edition disc signed by the artist. (Jasmine Multimedia; 800-798-7535; standard edition $45.95, limited edition $1,000)

—*Ann M. Marcus*

92-year-old Hirschfeld is thrilled with the technology that brings more than a thousand of his drawings to CD-ROM.

Platform: Win CD **Available:** September

Electronic entertainment SHOPPER

Rise of the Triad Official Player's Guide
By Bernie Yee

Don't venture into the heart of darkness without this hot strategy guide! This guide takes apart every level of this blastfest, and will give you the hands-on tips to succeed where others have failed!
$19.95
BK-339
Platform:
PC CD-ROM

Dark Forces Official Player's Guide
By Jeff Hoff

The Empire is up to some new tricks in Dark Forces, the exciting Star Wars game. Armed with over 240 pages of Jedi tips, strategies, tactics, maps and intelligence secrets, you'll be able to survive 14 grueling missions and save the Rebel Alliance.
$18.95
BK-315
Platform:
PC CD-ROM

Microsoft Flight Simulator 5.1 Authorized Pilot's Guide
By Shay Addams

Improve your flying skills with this guide to the hottest flight-simulation game of all time! This exciting guide gives you 240 pages of piloting tips and flight techniques, landing and takeoff strategies, and in-depth profiles of each airplane cockpit.
$19.95
BK-319
Platform:
PC CD-ROM

Full Throttle Official Player's Guide
By Jo Ashburn

Outwit Little Todd, jump the Poyahoga Gorge and survive the deadly demolition derby with this strategy guide. This guide gives you a complete walk through, hint section and detailed puzzle inventory. With 240 pages of tips and strategies, this book is the Full Throttle enthusiast's guide to success.
$18.95
BK-335
Platform:
PC CD-ROM

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Leader Board

The best-selling PC, Mac, and CD-ROM entertainment software

Rise of the Triad ascends to the No. 7 spot on the PC Games list.

Disney's Animated StoryBook: The Lion King lets out a roar on CD-ROM.

CD-ROM TITLES

RANK	TITLE	LAST MONTH	MONTHS ON CHART	EE RATING
1	Myst Stunning visuals, haunting audio, and intriguing puzzles keep this adventure game perpetually at the top of the charts. (Broderbund; 800-521-6263; Win CD/Mac CD, $55)	2	15	*****
2	Dark Forces Clever enhancements to Doom, a cast of Star Wars characters, and more strategy set LucasArts' 3-D shooter apart from the pack. (LucasArts Entertainment; 800-782-7927; DOS CD, street price $54.95)	1	2	****
3	Descent Maneuver your ship in all directions as you encounter robots and search for hostages in a series of off-world mines. (Interplay; 800-969-4263; DOS CD, $39)	8	2	****
4	Doom II The hair-raising sequel to Doom has more than 30 levels, seven new hellish creatures, and a super shotgun for lots of unfriendly fire. (GT Interactive; 800-332-4300; DOS CD, street price $40-$50)	5	7	*****
5	DZone Collector's Edition Play more than 900 new Doom levels, build your own episodes, and customize chilling Deathmatches. (WizardWorks; 612-559-5301; DOS CD, $39.99)	3	3	****
6	The Print Shop Deluxe CD Ensemble Five easy-to-use desktop publishing applications bundled on one disc. (Broderbund; 800-521-6263; Win CD/Mac CD, $80)	6	11	-
7	Quicken CD-ROM Deluxe The popular home-finance program is even more popular on CD-ROM. (Intuit; 800-624-9060; Win CD, $49.95)	10	6	-
8	Disney's Animated StoryBook: The Lion King Your kids can revisit Simba the lion and friends in an interactive storybook based on the Disney hit. (Disney Interactive; 800-688-1520; Win CD, $30)	4	6	***
9	Corel Gallery Ten thousand pieces of professional clip art on a single CD. (Corel; 800-773-6735; Win CD/Mac CD, $59)	-	6	-
10	One Stop CD Shop Ten A one-disc CD compilation including productivity applications, reference titles, and games. (Softkey; 800-227-5609; Win CD, $29.95)	-	2	-

PC GAMES

RANK	TITLE	LAST MONTH	MONTHS ON CHART	EE RATING
1	Dark Forces Clever enhancements to the Doom concept, a cast of Star Wars characters, and more strategy distinguish LucasArts' 3-D shooter. (LucasArts Entertainment; 800-782-7927; DOS CD, street price $54.95)	1	2	****
2	Myst Stunning visuals, haunting audio, and intriguing puzzles keep this unique adventure game perpetually near the top of the Leader Board. (Broderbund; 800-521-6263; Win CD, $55)	2	13	*****
3	Doom II This hair-raising sequel has more than 30 levels, seven hellish new creatures, and a double-barreled shotgun for lots of unfriendly fire. (GT Interactive; 800-332-4300; DOS CD, street price $40-$50)	7	7	*****
4	Descent Maneuver your ship in all directions as you fight off defense robots and search for hostages in a series of off-world mines. (Interplay; 800-969-4263; DOS/DOS CD, $39)	5	2	****
5	DZone Collector's Edition Play more than 900 new Doom levels, build your own episodes, and customize multiplayer Deathmatches. (WizardWorks; 612-559-5301; DOS CD, $39.99)	3	3	****
6	SimCity 2000 Build your city of the future with this improved version of the classic urban-simulation game. (Maxis; 800-336-2947; DOS/Windows, $54.95)	4	16	*****
7	Rise of the Triad A slick variation of Doom that tips the scales in terms of violence, if not spectacular game play. (Apogee Software; 800-426-3123; DOS, $29.95; DOS CD, $39.95)	-	7	***
8	X-COM: Terror From the Deep Search the ocean floor and destroy an army of sea monsters controlled by evil aliens in this strategy adventure. (MicroProse; 800-879-7529; DOS CD, $47.95)	-	1	****
9	Microsoft Flight Simulator 5.0 Upgraded graphics and new features keep this hugely popular flight sim soaring high. Release 5.1 is now on store shelves. (Microsoft; 800-426-9400; DOS, $49.95)	6	18	*****
10	Best of Microsoft Entertainment Pack The 13 top games from Microsoft's four Entertainment Packs, including Tetris and Pipe Dream. (Microsoft; 800-426-9400; Windows, $24.95)	-	3	-

MAC GAMES

RANK	TITLE	LAST MONTH	MONTHS ON CHART	EE RATING
1	Myst Stunning visuals, haunting audio, and intriguing puzzles keep this unique adventure game perpetually at the top of the charts. (Broderbund; 800-521-8263; Mac CD, $55)	1	18	*****
2	Marathon The first high-quality Doom-like game for the Mac places you on the Marathon, a spaceship that has been invaded by murderous aliens; eliminate them and save your comrades. (Bungie; 312-563-6200; Mac/Mac CD, street price $39-$45)	2	4	****
3	Mindscape CD Pack for Mac This collection of five Mac games and multimedia titles on one disc puts plenty of entertainment in a single package. (Mindscape; 800-234-3088; Mac CD, $51)	-	1	-
4	SimCity 2000 Build your own city of the future with this improved version of the classic urban-simulation game. (Maxis; 800-336-2947; Mac, $49.95)	4	17	*****
5	Rebel Assault Intense 3-D graphics and furious action highlight this Star Wars action/adventure. (LucasArts; 800-782-7927; Mac CD, $24.99)	-	5	****

Leader Board is a compilation of the top-selling software in 1,300 retail stores for April 1995. Some titles may appear in more than one category. Source: PC Data.

18   September 1995 • ELECTRONIC ENTERTAINMENT
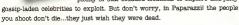
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Interactive Movie

Spotlight

QUALITY ENTERTAINMENT—AT A PRICE

Compaq's PC Toybox

This is one multimedia PC that looks good on the inside, too.

For a company that used to consider computers solely as a business tool, Compaq has learned a lot about the entertainment market. The **Presario CDTV 978** has all the features fun-loving consumers demand—except for an affordable price.

At its core, the CDTV 978 sports an Intel Pentium 75 processor, 8MB of RAM, and a 725MB hard drive. An integrated PCI local-bus graphics adapter with 1MB of video DRAM puts the pictures on the screen with ease. That's enough horsepower to run all but the most computer-abusing games and multimedia software.

Then there are the extras. The CDTV 978's hardware lineup includes a quad-speed CD-ROM drive, a 16-bit Sound Blaster-compatible sound card, an integrated speakerphone, a 14.4Kbps fax modem, and a cable-ready TV tuner card.

The CDTV 978 provides plenty of software, too. The 25 preinstalled titles include Media-Pilot for centralized control of TV, CD audio, voice mail, and faxing under Windows; Microsoft Encarta and Works for Windows; and Sierra On-Line/Dynamix's Lode Runner, The Even More Incredible Machine, and King's Quest VI games.

The system even looks good when you open the slick vertical case. Hand-removable metal screws hold up the sides. When you slip off the access panels, you're greeted by an unusual sight: neatly laid-out cables, easily accessible slots, and plenty of space to work, which proves to be a blessing if you need access to the available drive or bus slots to add a bigger hard drive or a sweeter-sounding wavetable sound card.

Unfortunately, upgradability is the one place where the CDTV 978 slips. The built-in local-bus graphics cannot be disabled, so you can't install any of the fancy 3-D or video-accelerator cards about to hit the market.

Our review system also included Compaq's 15-inch Presario 140 Multimedia Monitor ($150 to upgrade from the standard 14-inch model that comes with the system), which includes built-in speakers and a microphone. What it lacks is a volume control, forcing you to rely on the software utilities supplied with the PC. While the Windows control is fine, the memory-resident DOS utility doesn't work with all software. Just be sure to drop the volume before you start a new program, or you may get an earful.

The CDTV 978's features don't come cheap: At $2,449 with a 14-inch monitor (nearly $2,600 if you go for the barely acceptable 15-inch monitor), it's pricey even when you throw in Compaq's lifetime toll-free tech support. But if you can afford it and don't mind some upgrade limitations, the Presario CDTV 978 delivers top-quality fun. (Compaq Computer; 800-888-5858; $2,449 with a 14-inch monitor) —*Christopher Lindquist*

Format: PC
Rating: ✦ ✦ ✦ ⸴

Wings Over Asia

War is hell, but the planes were great!

Military aviation buffs will soar when they see Discovery Channel Multimedia's **Wings: Korea To Vietnam,** a historical title that covers aerial-warfare advancements in Asian conflicts from 1945 through 1975.

Desktop pilots can visit air bases set in each time period and check out 15 different 3-D modeled aircraft, including the F4U-4 Corsair, Sabre, and MiG-15. Manipulating each aircraft for a complete 360-degree view is as easy as pointing and clicking. You can also print out pictures of your favorite aircraft (especially effective on a color printer) or watch a series of video clips that depict actual warfare tactics used during each time period.

You can also browse through an extensive database containing technical and service information on more than 200 weapons systems and 500 aircraft, along with 1,000 wartime photographs. Wings also includes articles detailing the role of aircraft in modern warfare, plus an hour of live-action video.

As an added bonus, Discovery throws in three rudimentary flight sims that let you take to the skies in aircraft from each era. There's even a classic Sabre vs. MiG showdown. These simulations help add a sense of participation and tangibility to this well-executed historical title. (Discovery Channel Multimedia; 800-762-2189; $49.95) —*Steve Klett & Anthony Lukban*

Format: Win/Mac/Power Mac CD
Rating: ✦ ✦ ✦ ⸴

One-Piece Wonder

Apple's new one-piece Power Mac makes it easy to take RISC.

The **Macintosh Performa 5200CD** is the Power Mac for the rest of us. While the first Macintoshes to use the fast new PowerPC chips were relatively high-priced models aimed at business users, the one-piece 5200 is targeted directly at the home and entertainment market.

For about $2,000, the 5200CD comes standard with an acceptable 8MB of RAM (upgradable to 64MB) and an 800MB hard drive, up from the 500-700MB options on earlier Performas. (You can also opt for the 5215CD, which boasts a 1GB drive.) On the multimedia side, the 5200CD ships with a built-in 15-inch monitor, quad-speed CD-ROM drive, 16-bit sound card, integrated stereo speakers, and a microphone. You also get a built-in 14.4Kbps internal fax modem, with answering machine capabilities and a full-duplex speakerphone. For about $250 more, you can turn the computer into a combination video-editing center and cable-ready TV set.

Just as important, the system's 75MHz RISC-based PowerPC 603 processor delivers performance roughly comparable to a 75MHz Pentium—at a comparable price. For example, StarPress's Material World multimedia title, which is a bit pokey on a Quadra,

ran at warp speed on our test system, and Mechadeus' The Daedalus Encounter, a memory glutton, was just as peppy.

Best of all, the hot performance and slick features come with all the ergonomic advantages of a Macintosh. Setting up the system was a breeze. The 5200 series comes with a large set-up poster, but you won't need it. The one-piece construction means no confusing cables to untangle or hook up; just plug it in and go. The 50-pound integrated system tilts from 5 to 15 degrees and swivels 360 degrees for quick access to the back panel and hook-ups. And unlike one-piece PCs, this Power Mac can be easily expanded with SCSI peripherals.

Once you're running, the volume controls and headphone jack are sensibly placed on the front of the computer. An infrared remote control sensor and screen control buttons are also located on the computer's face (a remote control comes with the TV tuner). You can even adjust the .28mm dot pitch screen resolution from 640-by-480 (63 dots per inch) to

832-by-624 (81 dots per inch) on the fly.

Of course, you need software, and the 5200CD comes with a generous selection, including kids' titles, reference works, home finance applications, and productivity tools. The bundle doesn't include top-flight games, however.

The 5200CD's hot performance, robust feature set, hefty software pack, and affordable price certainly make it a legitimate alternative to a Pentium if you're in the market for a multimedia machine. With special software, it will even run many DOS and Windows programs. (Apple Computer; 800-776-2333; $1,999-$2,299)

—*Joel Enos*

Platform: Mac
Rating: ★ ★ ★ ★

Swimming Imagery

Welcome to the low-rent multimedia version of the *Sports Illustrated* swimsuit issue. The **Ujena Swimwear Screen Saver** from Aztech Software seems aimed at seriously superficial males poisoned by testosterone. The 70-plus blue-screen photos of swimsuit models superimposed over picturesque beach scenes are only mildly interesting, a bland electronic version of the '50s pinups.

The title is not exactly a technological marvel, either. For example, you're not supposed to notice that the producers have adhered sand to the models' legs to bolster the illusion that they're really on the beach. Also, the cheesy "animations" often

So this is the girl of your dreams?

produce hilarious results; imagine a model's arms and legs disappearing in Cheshire Cat-like fashion against the backdrop of the glistening shoreline.

Fun and games are limited to The Peep Show—the screen blacks out except for one to four small circles showing a fragment of the underlying image—and Puzzle Solver, a take-off on the Vid Grid games, in which you assemble pieces of an image.

Eventually, boredom will replace laughter, and you will wonder why you felt your PC couldn't survive without this silly electronic trash. (Aztech Software; 800-625-5455; $34.95)

—*Donald St. John*

Platform: Windows
Rating: ★

PHOTOGRAPHY BY WEINBERG & CLARK

Spotlight

500 Nations covers the traditions of America's native people and the atrocities they've suffered.

The Native American Story

Before Europeans arrived on this continent, some 500 tribes of native Americans lived here. Microsoft Home's **500 Nations** CD-ROM brings to life the history of these myriad people's religion, art, architecture, war, and peace. Narrated by Kevin Costner and corresponding with last spring's four-part TV miniseries, this Windows disc chronicles the Native American experience from the rise and fall of the Mayan society between 200 and 800 A.D. to the massacre at Wounded Knee, South Dakota in 1890.

Learn how the Aztec emperor Motecuhzoma feared for the lives of his people because of a prophecy, and see paintings that depict the arrival of Spanish conquistador Hernando Cortés on the Gulf of Mexico in 1519. You'll have an opportunity to grasp the indignities that Native Americans endured as they were forced onto reservations. There are more than a dozen storytellers who bring the history to life. Costner's adoring approach can seem a bit sanctimonious, but the title's 30 minutes of video, four and a half hours of audio, 2,000 photographs, and computer-generated graphics of ancient civilization make the disc truly engrossing and important. (Microsoft; 800-426-9400; $39.95)   *—Suzanne Frear*

Format: Win CD, Mac CD
Rating: ✦ ✦ ✦

Mixed Messages

Marshall McLuhan used to say "the medium is the message." That may be why avant-garde multimedia projects like Emergency Broadcast Network's **Telecommunication Break-**

Staccato imagery and erratic sound clips make Telecommunication Breakdown an exercise in tension.

down are so hard to understand. Mixing rapid-fire multiscreen graphics and video, socio-political media commentary, rap and techno-industrial music, and TV-soundtrack clips, this enhanced audio CD—which plays audio tracks on a regular CD player and reveals multimedia on a CD-ROM-equipped PC or Mac—is fascinating but largely incomprehensible. There's so much going on at once that it's hard to pick out coherent themes. Of course, that may be the point. (TVT Records; 212-979-6410; $17.99)

—Fredric Paul

Platform: Win/Mac/Audio CD
Rating: ✦ ✦ ✦ ◗

Creative Modeming

The long arm of Creative Labs just keeps on growing. Now the company, best known for its Sound Blaster standard, has entered the world of online communications with the **Modem Blaster 28.8**.

Rather than just a modem in a box with some basic communications software, the Modem Blaster comes complete with a variety of games, online-services software, and Internet utilities designed to jumpstart new modemaniacs.

If you'd rather not pop the top on your PC, you should find another modem; Creative doesn't make an external version of the Modem Blaster. Fortunately, the product comes with rudimentary but clear installation instructions, including information on how to change jumper settings should you run into any conflicts with your system's existing hardware.

Once you're up and running, take your pick of software toys. Load up "special edition" (read: incomplete) versions of Doom, Descent, Heretic, or Warcraft: Orcs and Humans. Then hook up with a modem-owning friend for some two-player action. If you'd rather cruise the Web, install the Chameleon Internet Tools from NetManage, quickly set up an account with Performance Systems International (subscriptions start at just $9 per month for nine hours of use), and you'll be a 'Nethead in no time.

You get all of this for a street price of around $220. If you've got more time than money, you can pick up a slower 14.4Kbps model for just $110. Regardless, the Modem Blaster will give you plenty to explore, all packaged in one neat box. (Creative Labs; 800-998-5227; street price $220) *—Christopher Lindquist*

Creative Labs' Modem Blaster 28.8 has the speed you need for today's multiplayer games.

Platform: PC
Rating: ✦ ✦ ✦ ◗

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COMING THIS FALL

Spotlight

ULTIMATE PIN-UP GIRL

Remembering Marilyn

This year's been a good one for Marilyn mania. On top of a commemorative postage stamp, a total of four new CD-ROM titles will recap Marilyn Monroe's life and times. Corel CD Home's **Bernard of Hollywood's Marilyn** is the first of these digital tributes to make it to the store shelves.

But first doesn't necessarily mean best. Unfortunately, this disc, based on the book by Susan Bernard—daughter of the famous photographer known as "Bernard of Hollywood"—is a clunky, disjointed collection of hit-or-miss text, a hundred intriguing photos, narrative audio clips, and some interesting video.

Using a journal metaphor to chronicle Marilyn's career, it pushes purple prose to the limit, even describing what Marilyn was supposedly feeling and thinking. The point of view shifts from Bernard to Marilyn, occasionally making the narrative hard to follow—especially since the entries often come without benefit of dates or context. Factual contradictions—such as which studio had just dumped

Bernard of Hollywood's beautiful photos are this disc's saving grace.

Marilyn when she was discovered by the William Morris agent, Johnny Hyde—don't help either.

Things don't get better on the multimedia side. Pages with Bernard's audio narration start playing automatically, even though you're usually still reading text from the previous entry. The screen doesn't advance to keep up with the narration. And you can barely hear the narration over the soundtrack; you must turn off the music if you want to listen to Bernard. Navigation is also frustrating: the arrow icons that advance you to the next page don't appear consistently, and there's no search function, either.

Even with the title's interesting photos, if you really love Marilyn, you may want to delay your purchase decision until you see the rest of the soon-to-appear Norma Jean interactive brigade: Gazelle Technologies' Marilyn & Andre, Fox Interactive's Marilyn Monroe Interactive Biography, and Hard Evidence: The Marilyn Monroe Files from Novell's PerfectHome division. (Corel CD Home; 613-728-8200; $69.95)

—Christine Grech

Platform: Win/Mac CD   Rating: ★ ✦

Multimedia Made Easy

So you want to upgrade your computer to play all those hot new multimedia games? A quad-speed upgrade kit will let anyone who can turn a screwdriver add sound and CD-ROM to almost any PC. We took two top-end kits out for a test drive, the **Reveal Quad Elite XL** and the **Turtle Beach Entertainer.**

The Reveal Quad Elite XL features a TEAC quad-speed CD-ROM drive; The Turtle Beach Entertainer sports a Mitsumi drive. Both kits include 16-bit wavetable sound cards, speakers, and installation video, and software.

The real difference was in the titles bundled in each kit. Reveal packs 47 popular titles, including such hits as Interplay's Cyberia, Origin's Wing Commander Privateer, Mindscape's Dragon Lore, and Maxis' SimCity 2000. You also get a rapid-fire joystick, a microphone, and a set of headphones. By contrast, the most interesting of the Entertainer's 12 titles are Papyrus' Indy Car Racing and LucasArts' Rebel Assault Special Edition, and there are no extra hardware goodies. Both kits come with a variety of WAV audio files and software to manipulate them.

Installation of both kits was fairly simple: Reveal's kit took less than an hour to install, the Turtle Beach kit about twice that. We plugged in the sound cards, hooked up the CD-ROM drives, and loaded the required software. But neither kit worked right away.

We received an error when installing The Entertainer, but a quick call to Turtle Beach's technical support department cleared up the problem with a minor change to the CONFIG.SYS file. The trouble we had installing the Reveal kit turned out to be a problem with our PC, but we were able to test Reveal's 24-hour customer service. We got through faster at 1 am. on the company's direct line than on the toll-free 800 number, but the customer service rep was awake and helpful.

Once properly installed, both kits delivered immediate speed and acoustic boosts over older double-speed drives and FM synthesis sound cards. Surprisingly, given Turtle Beach's reputation for audio excellence, Reveal won the sound derby with a pair of 80-watt powered speakers featuring separate bass, treble, and volume controls. The Entertainer makes do with small, software-controlled speakers that sounded tinny and bassless.

If you've got about $500 to spend upgrading your PC, the Reveal Quad Elite XL is a better all-around package for the money. (Reveal; 800-738-3251; $549. Turtle Beach; 800-645-5640; $449)

—John Sauer and Steve Klett

High-powered speakers, 47 titles, and hardware extras make the Quad Elite a strong performer.

Small speakers and a limited selection of titles make the Entertainer a weak act.

Reveal Quad Elite XL
Platform: PC   **Rating:** ★ ★ ★ ★

Turtle Beach Entertainer
Platform: PC   **Rating:** ★ ★ ★

We PuMPED UP THE JAM
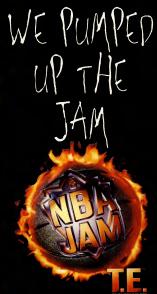
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Spotlight

Meet the Masters

The Masters tournament may happen only once a year, but with **The Masters CD** from Creative Multimedia, dedicated duffers can visit the world-famous Augusta National course as often as they like.

This disc allows you to explore the rich 60-year history of the Masters at your own pace. Take a leisurely stroll down memo-

Now you can play Augusta anytime.

ry lane, starting with anecdotes from the first tournament in 1934, or jump right to the 1994 Masters for a rundown of the most recent highlights.

Either way, this disc has all the stuff golf buffs could want. You get in-depth descriptions of each of Augusta's 18 holes, including contour maps of all the greens and video fly-bys. Relive great Masters moments and get detailed information about each tournament—from the weather to the winner.

You're also sure to improve your golf-trivia handicap by picking up a few choice factoids, like the name of the golfer who sank the longest putt in Masters' history (Nick Faldo in 1989) or the one who missed the shortest putt (Tommy Armour in 1937).

The disc also follows the Masters' tradition for quality, with its excellent graphics, video, and sound. While The Masters CD may not be everyone's hole-in-one, it's a gimme putt for golf purists. (Creative Multimedia, 503-241-4351; $39.95) —*Steve Klett*

Platform: Win CD, Mac CD
Rating: ★ ★ ★

Give Australia's Greentree Python a home on your PC.

Wild, Wild Life

Enjoy a trip to the African veldt without leaving home.

Two new CD-ROM screen savers from Wild World Software make seeing exotic places as easy as turning on your computer. **Australia Wild** features 280 breathtaking photographs of kangaroos, koalas, and sea turtles snapped by Australian photographer Darren Jew.

From frozen fjords to sizzling veldts, **Alaska Wild/Africa Wild** dresses up your screen with 310 full-screen photos of two wildly different landscapes. See a brown bear snatching trout from an Alaskan stream or a young lion lolling on the African savannah.

Unfortunately, both titles lack animation, but the still photos are captivating. Floppy disk versions of both titles that contain only 50 photographs each are also available. (Wild World Software; 206-402-6399; $39.95 each) —*Suzanne Frear*

Platform: Win CD, Win
Rating: ★ ★ ★

Great Bose, No Jest

Most computers today support CD-quality, 16-bit stereo sound. Unfortunately, you may not realize it unless you have the proper speakers.

While the current rage in multimedia sound is three-piece speaker systems that include a subwoofer to provide booming bass (see "Make Doom Go Boom!", August 1995, page 78), Bose's **MediaMate** computer speakers provide

Make multimedia shake, rattle and roll with Bose's MediaMate speakers.

comparable performance without the cumbersome subwoofer.

With close-up listening in mind, Bose uses proprietary circuitry to produce rich, deep bass even at low volume. The MediaMates may not shake the building, but they will rattle your desktop. On the high end, the MediaMates do an above-average job of treble reproduction.

The MediaMates are even stylish. The trim, grey texture rectangular enclosures are about the size of a tilted brick, so they won't take up a lot of desktop real estate. If you're really crammed for space, you can mount them on the sides of your monitor.

Two sound-source inputs accommodate both computer sound cards and an extra sound source such as a portable CD player. Source mixing and volume controls, as well as a headphone jack, are located where they should be—in front, for easy access.

At $339, the MediaMate speakers are expensive, costing more than many subwoofer-equipped speaker systems. But they let you attach Bose quality to your computer for a lot less than the $699 you'll pay for Bose's own Acoustimass three-piece system. (Bose; 800-444-2673; $339) —*Steve Klett*

Platform: PC/Mac   **Rating:** ★ ★ ★ ★

Spotlight

DIG THIS!

Digital Dirt

I s an unruly spread of impertinent weeds about to take over your lawn? You could rent a goat to clear the scrub, but you'd be better off consulting the **Garden Encyclopedia** for tips on turning your wasteland into a floral graceland. The CD-ROM reference title features detailed information on preparing soil, selecting plants, performing successful transplants, and caring for your new garden. The comprehensive database covers more than 1,000 flowers and plants.

The Garden Encyclopedia's artful interface offers multiple ways to get your hands dirty. The helpful gardening tutorial covers all the basics, from choosing a nursery to using natural pesticides. The disc adeptly combines text, photos, and videos to illustrate important concepts and techniques. Critical definitions and diagrams appear unobtrusively over the text to help you better understand the material.

Encyclopedia entries feature essential information about each flower or plant.

Don't know exactly what you want to plant? Search the encyclopedia by attributes such as sunlight requirements, color, and blooming season. The title even pronounces the plants' botanical names for you. Collect images of plants you like in a virtual floral photo album, and print out a shopping list to take to the nursery.

Even if you don't have a green thumb, the Gardening Encyclopedia's detailed information and beautiful images will make you feel like a backyard botanist. And the goat will like the box. (Books That Work; 800-242-4546; street price $30)

—Bill Meyer

Platform: Win CD, Mac CD
Rating: ★ ★ ★

Instructive videos clarify tricky gardening techniques, such as transplanting delicate seedlings.
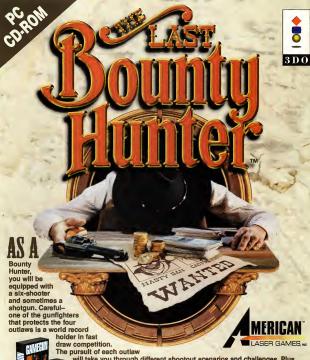
Library Of Ideas

I f **Monks Had Macs...** is a long-standing, eclectic archive of fascinating stuff originally released in Hyper-Card format and now available, thanks to Voyager, on CD-ROM for the Mac.

This fascinating hodgepodge of ideas from Brian Thomas and friends

The library in If Monks Had Macs... discusses the JFK assassination and other intriguing topics.

lurks behind a friendly library-style interface. Read Thoreau's evocative *Walden* or Thomas à Kempis' medieval tome *Imitation of Christ;* check out actual Warren Commission testimony on the assassination of President Kennedy; or peruse a critique of 16th-century Flemish painter Pieter Bruegel's "Tower of Babel."

There are plenty of places for you to make your own mark, including the Get An Inner Life! section, where you learn creative journal-keeping, or the Monks' Memory Challenge, an interactive fact game. If Monks Had Macs... is a rich compendium of thought-provoking material that would make any Gregorian chant. (Voyager; 800-446-2001; $34.95)

—Donald St. John

Platform: Mac CD
Rating: ★ ★ ★ ★

Multimedia Classics

W hile Microsoft, Apple, Sony, and others scramble to create enhanced CDs of pop music releases, a couple of small companies are quietly making the concept a reality with classical music.

Multimedia developer Music Pen and budget-conscious producer Delta Music have teamed up to create a line of **LaserLight Digital CD+ROM** discs that add multimedia liner notes to classical music CDs. Pop the discs into your CD player to hear the music (just be sure to skip track 1), or stick them into your Windows PC to see the musical score, read liner notes, or watch five to ten minutes of video that shows the composers' native countryside.

Although the performances are public-domain and the CD-ROM portion relatively limited, the discs cost less than $10—compared to about $5 for audio-only LaserLight discs. The companies have already released 15 different works, including **all nine Beethoven symphonies, Mozart's symphonies No. 40 and 41, Bach's Brandenburg Concertos #1-3 and #4-6, Vivaldi's Four Seasons,** and **Dvorak's New World Symphony.** They plan to offer 35 titles by the end of the year and 80 by the end of 1996. And because all the discs share the same icon and interface, you have to install them only once. (Delta Music; 310-453-9504; $9.95 each)

—Fredric Paul

Platform: Win/Audio CD
Rating: ★ ★ ★ ½

LaserLight Digital CD-ROM's virtual concert hall enhances classical music with text and the musical score.

edutainment

Multimedia Back to School

The end of summer means only one thing to kids: the start of another school year. It's a time of anxiety and anticipation—and maybe just a little bit of longing for a few more sun-filled, homework-free days. If your kids need a little encouragement to motivate them for the first day of school, any of a host of new educational titles should do the trick.

Make the Grade

School-age kids can brush up on the basics with Sanctuary Woods' **Math Ace Grand Prix** and **Word City Grand Prix**. These updated versions of the company's popular titles blend learning with an arcade-style driving game. Players solve math and language problems to earn sections of a racetrack; when the track's complete, they enter the Grand Prix. In Math Ace, kids ages 8 to 14 choose the topics they'd like to practice—from addition and subtraction up to prealgebra and geometry. Likewise, Word City lets kids ages 7 to 14 choose to work on reading comprehension, spelling, and vocabulary. Reading Ace will also help kids with those dreaded weekly spelling tests by letting them enter their own words, then drilling them on the customized list. CD-ROM versions of the programs will be available in August. (Sanctuary Woods; 415-286-6000; Windows/Mac, Win/Mac CD; $39.95 each)

For a little break from all that reading and math, kids can try MECC's **TesselMania!** The creativity program introduces kids age 8 and older to the geometric world of tessellation patterns—interlocking images like those created by artist M.C. Escher. Young artists design and decorate their own patterns, then show them off on posters, calendars, and even T-shirts. The kids will think it's all fun and games, but they'll also be learning about transformational geometry. Look for TesselMania in October. (MECC; 800-685-6322; Win/Mac CD, $40)

High Marks

For high school students, *back to school* means back to term papers. Older children may have already gotten a taste of the Internet's vast resources, but now they can put this resource to work with a subscription to Infonautics' **Homework Helper**. Previously available only through Prodigy, the huge collection of databases—from encyclopedias and reference works to transcripts and photo libraries—debuts on the Internet this fall.

While big brother and sister scamper off to school, preschoolers can learn with JumpStart Kindergarten.

What makes using Homework Helper different from dialing into a library to do research is that you can ask it regular questions, such as "Where's the oldest gold mine?", not just search on specific topics. You can search any word in any article with a single mouse click; your search results are prioritized to give you the best possible matches to your question. (For more on Homework Helper, see "Cyberspace Just for Kids," May 1995, page 36.) (Infonautics; 610-971-8840; not yet priced for the Internet)

High school term papers can quickly turn students' thoughts to college. Good scores on the SAT (Standardized Academic Test) and ACT (American College Test) will help them get into their choice of schools, so a little preparation is wise. Zeleos's **Team SAT** takes the personal approach by letting kids choose from eight video guides who lead them through the program and provide test-taking techniques and strategies. (Zeleos; 800-345-6777; Win/Mac CD, $29.95)

For a more customized approach, try Davidson's **Your Personal Trainer for the SAT** and **Your Personal Trainer for the ACT**. Each sets up a study course for your high schooler, based on how well he or she does on a practice test. (Davidson & Associates; 800-545-7677; Win/Mac CD, $40) Finally, Swfte's upcoming

Underground SAT CD-ROM Handbook takes a more radical approach. Based upon the Workman Publishing book *Up Your Score*, which was written by high school students with perfect and near-perfect scores, this title provides a no-nonsense guide to outsmarting the test-makers of the SAT. Look for it in August. (Swfte; 302-234-1740; Win/Mac CD, $49.95)

Preparing for a grueling test is no fun, but going to college certainly can be. And a pair of discs can help students choose the right school. Kaplan—the test-prep company—offers the lowdown on some 1,700 schools in **On Campus 96**. (Kaplan Interactive; 212-752-1840; Win CD/Mac CD, $49.95) Alternately, consult **Lovejoy's College Counselor**, which profiles some 1,600 four-year colleges across the country. (Intermedia Interactive Software; 800-545-7677; Win CD, $39.95)

Early Achievers

Even if your kids aren't ready for school, they don't have to miss out on computer learning. You can help little ones get ready with Knowledge Adventure's **JumpStart Kindergarten** for ages 4 to 6. The mix of activities teaches basic prereading, vocabulary, and math, and the title's five fun songs are sure to get and keep the tykes' attention. (Knowledge Adventure; 818-542-4200; Win CD, $35)

To introduce younger kids to reading on the computer, check out Apple Home Learning's school-tested WiggleWorks system. The newest offering for the home is **WiggleWorks Story Pack 2** for ages 3 to 8. The disc contains three stories that children can listen to and read—kids can even record their voices if the computer has a microphone. WiggleWorks also suggests activities for kids and parents based on the disc's stories. (Apple Home Learning; 800-542-4240; Win CD/Mac CD, $51.60)

For more reading fun, turn to **Muppets Reading and Phonics II.** Jim Henson's lovable critters—including Kermit, Miss Piggy, and Fozzie Bear—help kids learn reading skills in the title's three sections: Sorting and Ordering, Thinking Skills, and Sound Patterns. (American Education Publishing; 800-542-7833; Win/Mac CD, $49.95)

All in the Family

Finally, some titles are perfect for the whole family. **Microsoft Bookshelf '95** includes a dictionary, almanac, thesaurus, encyclopedia, quotation dictionary, zip code/post office directory, and history book—all on a single CD-ROM. (Microsoft; 800-426-9400; Win CD, $69.95)

And because the new school year brings new activities, dates, and events to schedule, Individual Software's **Peanuts Family Organizer** uses appearances by Charlie Brown and the rest of the Peanuts gang to spice up its calendar, to-do list, address book, and message center. (Individual Software; 510-734-6767; Windows/Mac, $19.95)

–Christine Grech

Win the race—and improve math skills—in Math Ace Grand Prix.

High schoolers can prepare for college entrance exams with Team SAT.

The Underground SAT is the guerrilla guide to the big test.

Parents and kids alike will find plenty to do in WiggleWorks.

Keep track of new schedules with the Peanuts Family Organizer.

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<u>HOT NEW KIDS' TITLES</u>

Sneak Preview

Globe-trot with Mortimer the flying snail and learn about the animals in the Cupboard.

For kids, fall means going back to school, but for multimedia companies it means gearing up for the holidays—and beyond—with a whole busload of exciting new CD-ROM titles. Try these for starters...

Think pink with Wanderlust Interactive's upcoming **Intelligent Fun & Games** series, starring the **Pink Panther**. In his first adventure, the cool cartoon cat will lead kids on a mystery tour

Color your computer Pink with the Panther's geography adventure game.

Walk in the shoes of an 18th-century Iroquois in The Indian in the Cupboard.

around the globe, where they'll learn about the customs and cultures of various peoples. Look for this Windows and Mac CD-ROM next spring. (Wanderlust Interactive; 212-966-8887; Win/Mac CD, not yet priced)

Peter and pals hop onto the computer in Mindscape's Peter Rabbit and Benjamin Bunny.

He's back, and this time players help Putt-Putt save the zoo.

Peter Rabbit is another familiar critter making his way onto CD-ROM in Mindscape's upcoming **The Adventures of Peter Rabbit and Benjamin Bunny**, due out in time for the holidays. The interactive storybook includes the text of two Original Peter Rabbit books, along with beautiful animated drawings in the style of the original works. Kids can follow along with the tale or enter Explore mode and wander through Mr. McGregor's garden or anywhere else in Peter's world. (Mindscape; 415-883-3000; Win CD/ Mac CD, not yet priced)

Go Native

Disney made a splash with its Lion King storybook. The company is again applying its magic in **Disney's Animated StoryBook: Pocahontas**. The movie debuted in Central Park last spring, but the interactive storybook for ages 3 to 9 won't be available until November. Kids will experience the famous love story of the Native American woman and British soldier Captain John Smith, as well as play games and learn songs. (Disney Interactive; 800-688-1520; Win CD/Mac CD, street price $40)

Another movie-inspired CD-ROM that will acquaint kids with Native American culture is Viacom New Media's **The Indian in the Cupboard**, scheduled to arrive in October. Like the film and the book on which it is based, children ages 6 and up can bring

toys to life by placing them in the Magic Cupboard. They can also explore the world from the perspective of one of these new pals, an 18th-century Iroquois Indian named Little Bear. (Viacom New Media; 800-469-2539; Win/Mac CD, $49.95)

Updated Classics

The same fairy tales that you loved as a kid are sure to enchant your little ones. TerraGlyph's upcoming **Hansel & Gretel and the Enchanted Castle** and **Rumpelstiltskin's Labyrinth of the Lost** are updated versions of classic tales featuring cartoon-quality animation and lots of original music. Look for both titles this fall. (TerraGlyph Interactive Studios; 708-781-4100; Win CD, $49.95 each)

Not quite as old but fast becoming a classic, lovable car character Putt-Putt merges into his third computer adventure, **Putt Putt Saves the Zoo**. This time around, Putt Putt must round up the missing baby animals so that the zoo can open on time. Look for it in August. (Humongous Entertainment; 206-486-9258; Win CD/Mac CD, $39.95)

Saving the virtual animals is also the name of the game in LucasArts Entertainment's first children's title, **Mortimer and the Riddles of the Medallion**. This 3-D adventure game for ages 4 to 9 stars a giant flying snail named Mortimer who takes kids on a global adventure in which they must save the world's animals from turning into statues. Along the way, kids get to guide Mortimer and learn all sorts of fun animal facts. Mortimer will land on store shelves early next year. (LucasArts Entertainment; 800-782-7927; Win CD/Mac CD, not yet priced)

—*Christine Grech*

Cheater!

Hi. My name is Chris Lindquist, and I cheat at computer games.

I admit it: I've never liked the endless frustration that some games dish out. Besides, more than a few games are so lame that it's more fun to muck around in their innards with the Norton Utilities sector editor than it is to play them.

[Warning: *Electronic Entertainment* has determined that mucking around with sector editors can be hazardous to your computer. We do not advocate such techniques for enhancing your gaming experience.]

Jeez, the lawyers are everywhere these days, aren't they? Where was I...ah, yes.

In college, my friends and I would spend countless hours finding new ways to

Cheating at computer games is about as close to playing God as any of us is likely to get.

add lives, money, hit points, or whatever else we figured would allow us to dominate a game. This tinkering was a form of recreation in itself. Does that mean we were bad people? I think not.

My reasoning goes something like this:

1. People play games to have fun.

2. Being repeatedly humiliated by a game because your reflexes aren't those of a fit 18-year-old or because you're tired of playing "guess what the programmer was smoking when he came up with this puzzle" is not fun.

3. Playing God is fun.
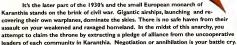
4. Cheating at games is about as close to playing God as any of us is likely to get.

I know, I know. The anticheaters have all sorts of arguments of their own.

"*Playing all the way through a game gives you a sense of accomplishment.*" Thank you, but I get my feelings of accomplishment from challenges a bit more serious than computer games.

"*Cheating just shows that you don't have the smarts/guts/reflexes to win legitimately.*" Or perhaps it just demonstrates that the game is simply too difficult/boring/confusing for me to bother with. Or maybe I just don't have the time.

"*Cheating takes all the fun out of a game.*" Yeah, right. Tell that to anyone who's had the thrill of watching a spider demon explode two feet in front of him while he laughed with maniacal glee. Besides, if some schmucks want to spend $50 on a game only to jump straight to the end without playing through, let 'em. It's their money.

"*Cheating at anything is simply wrong.*" Give me a break. We're not talking about plagiarizing a Stanford master's thesis here. We're talking about a computer game.

Now, I don't cheat all the time. Heck, I actually cheat very little considering how much time I spend playing games. I finished Doom and Dark Forces without resorting to the passcodes. However, both those games are perfect examples of where cheats can be loads of fun: Sometimes, after a long day at the office, you just want to kill things.

Until recently, game cheating was mostly the realm of hackers who could read hexadecimal notation, or those of us so serious about it that we indulged in shareware and small-company commercial game-cheater programs. And there have always been a few computer game makers, such as id Software, that were inclined to build in—and eventually release to the public—a variety of cool cheats.

Now memory maven Quarterdeck has entered the fray with its GameRunner utilities, which include AXIS-The Gamecheater (call Quarterdeck at 800-354-2834 for more information). The difference is that Quarterdeck—which made its rep with memory management programs like QEMM—may just have the clout to get some of the "we don't condone cheating" game companies to lighten up a bit.

Many of them probably will, too. The almighty dollar will dictate it. Cheats and passcodes have long increased the shelf life and cool factor of console and arcade games. The same thing will happen with computer titles. Cheats will no longer be toys just for the in-crowd. They'll be built-in and advertised—a selling feature.

FLY IN THE FACE OF DANGER

It's the later part of the 1930's and the small European monarch of Karanthia stands on the brink of civil war. Gigantic airships, launching and recovering their own warplanes, dominate the skies. There is no safe haven from their assault on your weakened and ravaged homeland. In the midst of this anarchy, you attempt to claim the throne by extracting a pledge of alliance from the uncooperative leaders of each community in Karanthia. Negotiation or annihilation is your battle cry.

Air Power: Battle in the Skies incorporates the best elements of flight sims, air combat, military strategy and role-playing in this violent fictional world. And, you'll find stunning 3D graphics and digitized sound effects enhance the high-resolution, fast-frame gameplay. So load up your airborne armada and set your sights on claiming the throne.

AIR POWER
BATTLE IN THE SKIES

MINDSCAPE®

Mindscape, Inc. 88 Leveroni Court Novato, CA 94949

Christine Grech

Digital Road Trip

By the time I get to Phoenix…I'll have driven 1,046 miles, spent 17 hours and 17 minutes in the car, and plunked down $40.50 for gasoline.

That may not have been what country crooner Glen Campbell had in mind when he sang the original tune, but that's what my computer travel planner tells me.

You see, the Multimaniac has been feeling a little antsy lately. Could be a case of too much time spent at the keyboard. So, with fall looming on the horizon, I've decided to give the summer vacation thing a try. Think I'll go for a nice, long drive—courtesy of my PC.

Multimedia trip planners and road atlases are an essential part of any modern multimedia library. Digital travelers can choose from such products as AAA Trip Planner from Compton's NewMedia, Rand McNally's TripMaker, and DeLorme's Map 'n' Go, which serve as companions to their companies' road atlases. They calculate routes, provide directions, and suggest attractions along the way. There's also the budget-priced Expert Travel Planner Win CD, which does essentially the same thing, but the route planning and attraction portions are not as well integrated as the other packages.

Each of these programs can help you get where you're going, but the Multimaniac always rides the cutting edge, so I turned to the newest offering: Microsoft Automap Road Atlas 4.0.

I decided to head right for the sun. Destination: Phoenix, with a stop along the way at the Grand Canyon.

I fired up Automap and took the easy road, so to speak, by starting with the Route Wizard, a feature that walked me through planning a trip in eight quick steps. I typed in the vitals: starting point, destination, and stopping points. I was surprised to learn that there are 14 U.S. cities named Phoenix, but I stuck with my original plan to visit Arizona. Next, I asked the Route Wizard to tell me about attractions and parks close to my route. Then I typed in how many hours a day I'd be driving, what kind of gas mileage my car gets, and how fast I'll be going on various types of roads. Finally, I opted for the shortest possible route.

Voila! Detailed directions taking me from the City by the Bay to the Valley of the Sun, with an approximate time schedule for each day, including when I need to stop and refuel. Whenever an interesting sight is in range, it's listed in blue in the itinerary, with directions on how to get there. Mostly you get standard tourist attractions like state parks and zoos, but I also uncovered such gems as Rawhide Western Town and Island of Big Surf, a water park in Tempe, Arizona, that has artificial waves on which you can surf. Cool, dude.

What makes Automap better than a regular atlas is that you don't have to decipher the map's tangle of highways and byways. Automap's directions are in plain English: "bear left on I-40."

Automap also provides maps that trace your route and are dotted with icons for various points of interest. That may sound like a good idea, but it's not. The route map is so cluttered with tiny camera icons (indicating a picture of the site), little tickets (for attractions), and the like that you can't even discern roads and place names. Sure, you can turn off the various icons and lessen the map detail, but it's still not very useful. And when you click anywhere on the map, place names and interstate highway symbols pop up, further obscuring the map—and each other. Watching these maps redraw the layers and layers of icons is enough to make the Multimaniac stay home.

Automap—like the other travel-planning programs—is great for generating quick, reliable directions. But it isn't that helpful for planning a unique trip filled with exciting stops. You're better off thumbing through a good travel book or popping into an online travel forum and getting advice from others who have been there. Bon voyage! (Microsoft, 800-426-9400; Win CD, $39.95)

> **With maps like these, even the Multimaniac could get lost.**

> **Microsoft Automap Road Atlas 4.0 takes care of all the details, including when to stop and fill up the tank.**

> ## Voila! Detailed directions taking me from the City by the Bay to the Valley of the Sun.

HARPOON II DELUXE ™
The Next Generation is Launched!

The shock wave is just beginning. Announcing the most advanced naval battle simulation ever! ... Empowered to let you re-write history. Used in training by the Naval Academy, HARPOON II DELUXE puts you in the command center action like never before.

HARPOON II DELUXE

MULTI-MEDIA EDITION
ON CD-ROM

• 2 additional battlesets, for 30 new, startlingly realistic scenarios.
• All-new Scenario Editor. You design the encounter.
• Over 100 full-motion video and sound clips for unbelievable realism.
• Detect, track and engage all forces.
• Realistic weather modeling.
• Military-style vector maps.
• Vast database with tech specs and pictures of hundreds of ships, subs and aircraft.
• Lifelike communications models recreate electronic warfare.
• Compatible with Cold War and Westpac Battle Sets.

Add an incredible array of features like toolbar control buttons, easy user interface, and you have the most realistic battle game ever.

Actual video clips of weapon launches and explosions.

Altitude, depth, and weather information.

Formation editor defines threat axis and patrol zones.
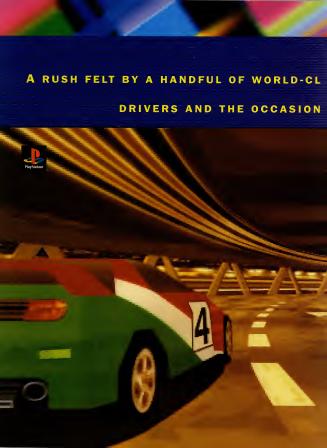
Hundreds of database specs, photos and drawings of military hardware.

INTRACORP

A RUSH FELT BY A HANDFUL OF WORLD-CL

DRIVERS AND THE OCCASION

A S S

AL PARKING VALET. |

Imagine driving the wrong way in rush hour traffic, before catching enough air to make a seagull blush. Is it the L.A. freeways? No, it's Sony® PlayStation.™ Introducing Namco's® *Ridge Racer*.™ Gut-wrenching first-person views, five different courses and 200+ m.p.h. lap speeds. Only the PlayStation provides racing so realistic you'll need to check your shorts for skidmarks. One final plug: Look for Ridge Racer and 50 other titles including Mortal Kombat™ 3 on the PlayStation before Christmas.

PlayStation ™

U R N O T E

E N O S I V E S

KIDS TO ADULTS

K-A
AGES 6+

Is It a Movie, Or Is It a Game?

So-called interactive movies blur the line between feature films and computer games. Here's what to expect.

He dashes forward off the top of a 20-foot cornice and lands without a wobble. A branch stirs in the distance and he switches on his DNA verification tracker helmet. Suddenly a sleuw of armed snowboarders emerge from the trees. With the accuracy of a trained killer, he turns and shoots two, sending them headlong into a gorge below. Quickly, he activates two rockets on his jet-powered skis…

Is it a classic scene from a movie like *The Spy Who Loved Me?* No. It's just a typical scenario from Fox Hunt, Capcom's upcoming full-motion video computer game, or "interactive movie," as they are sometimes called.

It sounds exciting, but are these high-tech flicks worth your money and time? Admission costs from $50 to $100, along with an investment of many hours.

You'll have to put up with video that's less than TV-quality, because a variety of technical constraints can cause the video to be dark, muddy, and subject to blips, delays, and jerky motion. Just as important, integrating live-action video clips in adventure games or space simulations can seriously compromise game play. If you're looking for full control, lots of diverse puzzles, and immediate action, you may be disappointed with video-based games.

Nonetheless, as such big-time PC makers as Compaq begin to include video-acceleration technology in their standard multimedia systems, you can bet that even more game makers will break out their director's chairs and start shooting.

Indeed, more than two dozen new full-motion-video computer games will be on store shelves this fall and early next year. You'll also see a slew of action games that include non-interactive video clips from feature films, such as Acclaim's Judge Dredd and Batman Forever. Finally, look for a few video-based games released in conjunction with a movie. These may use original footage, a la Sony Computer Entertainment's Johnny Mnemonic.

We look at this interactive-cinema rage and tell you about the newest contenders coming soon to a computer near you.

The Golden Age

Interactive movie is a rather presumptuous title for a medium born in 1991 when Access Software introduced The Martian Memorandum, the first game to include digitized video of live actors. But it wasn't until 1993 that a company—ironically located in sleepy Medford, Oregon, light years from Hollywood or Silicon Valley—developed the game that lit fire to the live-action-video fuse. Trilobyte's The 7th Guest sold more than a million units, if you include copies bundled with multimedia PCs and upgrade kits.

The success of The 7th Guest—with its mix of human actors, horror-movie storyline, and puzzles—was a watershed. It led to mountains of multimedia hype, hordes of pretentious cocktail parties, and precocious dreams of "Siliwood"— the much-anticipated marriage of Hollywood and Silicon Valley. Now that games seemed more like television and movies, such Goliath entertainment companies as MGM, Fox, and Viacom jumped into the fray, dreaming that software had hit the big time and would soon be a mass-market phenomenon.

In no time, a flood of me-too efforts followed The 7th Guest to the party. Such first-generation interactive movies as Critical Path from Mechadeus and Hyperbole's Quantum Gate used a video technique called chroma-key (see Code Blue) that incorporated real actors, but didn't deliver compelling game play.

By Bill Meyer

7th Level mixes futuristic combat with live-action video in G-Nome.

Origin's Wing Commander IV could cost as much as $6 million to make.

Tim Curry stars as the diabolical Dr. Frankenstein in Interplay's Frankenstein: Through the Eyes of the Monster.

The cinematic mystery game Psychic Detective from Electronic Arts has little in the way of traditional game play.

Baywatch's Yasmine Bleeth is a hard-nosed commando in Digital Pictures' Maximum Surge.

A Fork in the Road

Now a days game developers are taking varying approaches to integrating video in their products. A few gutsy developers have taken an "all or nothing" approach that relies on the video to drive both story and game play. In games such as Johnny Mnemonic, players interact directly with the video by talking to characters or directing action. These games tend to be heavy on production values, but light on game play.

Other game makers have used video primarily to propel the game's storyline. These games, such as The 7th Guest or Wing Commander III, run video as a series of cut scenes linking more-traditional game-play

Sierra On-Line's Phantasmagoria spices up the adventure game format with great art and video.

segments. The challenge here is to weave together movie and game to create a satisfying experience.

No one knows which approach will win players. "I think the concept [of cinematic games] is a good one, but it has not yet been determined how to use it," says Roberta Williams, co-founder of Sierra On-Line. "It's a concept that needs molding and massaging."

Williams foresees an evolutionary process involving the trial and error of many developers. For her, as for most game makers, the big question is how to successfully mix interactivity with cinematic elements. But Williams says that expanding the movie portion is not the answer. Instead, she envisions interactive movies as glorified adventure games, with quick and effective cinematic elements leading to more interactivity and game play. "Movies are movies, and that's fine," Williams asserts, "but people want to do."

Other developers hold our more hope of marrying interactivity to the video experience. Digital Pictures was one of the first companies to take the all-video leap—eliminating animated game-play altogether. Unfortunately, such early Digital Pictures titles as the adventure shooter Corpse Killer, starring Vincent Schiavelli, were marred by poor-

Newcomer Andrew Bowen stars in Capcom's James Bond spoof, Fox Hunt.

quality video and simple-minded game play.

Digital Pictures' newest crop of titles, including Maximum Surge, use the company's proprietary software-based video decompression technology called DigiChrome to produce surprisingly crisp full-motion, full-screen video. You join Baywatch regular Yasmine Bleeth to hunt down the evil Drexel (Walter Koenig, Chekov in the original Star Trek), who is attempting to control various power stations and repopulate a territory with androids.

(Speaking of Baywatch beauties, Erika Eleniak stars in Imagination Pilots Entertainment's Panic in the Park, a game

You play a dolphin on a research station in Magnet Interactive's Bluestar.

that mixes a video adventure with arcade-style gaming. And Pamela Anderson is appearing in Dark Horse Interactive's upcoming Barb Wire. Based on the Dark Horse comic book heroine, Barb Wire is also an upcoming big-screen movie.)

Maximum Surge also uses a second video technology called InstaSwitch to continuously composite four planes of video—a background, target, and two objects in the foreground—on top of each other in real time. The purpose is to give the player greater movement control and variety. For instance, you will be able to jump behind various obstacles and peek out from behind them in multiple directions. "Instead of coming at it like a movie, we decided to design a good

action game that looks like a movie," says director of marketing Kevin Welsh. "Gameplay control was the number one item on our agenda."

Window of Opportunity

Capcom, a new player in the PC CD-ROM market, is also shooting for a seamless blend of movie and game. Its new Fox Hunt spoofs the James Bond genre, using a game engine based on the one Peter Marx originally designed for Johnny Mnemonic.

This engine allows players to interact with the movie without stopping the action. At certain "windows of opportunity," you can press a key to direct the action. No icons, dialogue menus, or abstract geometric puzzles clutter the screen.

Marx and producer Adam Burns share a cinematic vision for Fox Hunt. Burns thinks early full-motion video games were more about technology than character and story. "[The games] didn't come from a filmmaker's point of view," Burns argues. Fox Hunt will be different, he says: "We could have edited it into a feature film."

Just like a movie, Fox Hunt is structured in three acts, shot on 16mm film instead of video for better resolution, and filmed on real sets. Fox Hunt stars such seasoned actors as former Bond George Lazenby and Timothy Bottoms (The Last Picture Show), as well as newcomer Andrew Bowen as the game's unlikely hero.

But while Burns believes the game's cinematic element is critical, he rejects the label of "interactive movie." "[Fox Hunt] has the look, feel, and structure of a feature film, but it is not an interactive movie—it's a game," he says. "I think the fundamental problem with most full-motion-video games is that they don't have good game play."

To remedy that situation, Fox Hunt's windows of opportunity will let you ski, skydive, and shoot. And the game will offer multiple paths, bad guys, and endings. You can even wear the black hat.

Marx claims the new game will go far beyond Johnny Mnemonic's limited action and choppy movement. "We need that compelling time component," he says. "We need to have the story moving along so you don't leave the cinematic experience—it's a motion picture that doesn't stop moving."

Electronic Arts is shooting for a slightly

Coming Attractions

Dozens of full-motion-video computer games are on the bill for this fall, the holiday season, and next year. This list should point you in the right direction.

Barb Wire Model/actress Pamela Anderson teams up with the interactive division of

Groller Electronic Publishing's SFPD Homicide features actual members of the police force.

Dark Horse Comics to bring its heroine Barb Wire to a computer—and a movie theater—near you this fall. (Dark Horse Interactive; 503-652-8815; not yet priced)

Bluestar You play a dolphin freed from a circus tank to become lead programmer on the space station Bluestar. Serve Commander Douglas and save the space station from conspiracy. Look for it in early '96. (Magnet Interactive; 202-625-1111; Win CD, not yet priced)

Frankenstein: Through the Eyes of the Monster Stage and film star Tim Curry portrays Dr. Frankenstein in this gothic tale of horror based on Mary Shelley's classic novel. Look for it now on the Mac and in September for the PC. (Interplay; 800-969-4263; DOS CD/Mac CD, $49.95)

SFPD Homicide "Case File: The Body In The Bay" This detective thriller based on a real case is hosted by former San Francisco deputy police chief Kevin Mullen and

stars actual members of the SFPD. It's due in the fall. (Groller Electronic Publishing; 800-285-4534; Win CD/Mac CD, $49.95)

G-Nome You play a Native American who must lead a band of alien mercenaries against a genetically engineered warrior called the G-Nome. The cinematic combat game will be out in early 1996. (7th Level; 800-884-8863; Win CD, not yet priced)

Journeyman Project 2: Buried in Time Framed for a crime you didn't commit, your only chance to save yourself is to travel back in time to medieval Europe and clear your name. It should be out now. (Sanctuary Woods; 800-943-3664; Win CD/Mac CD, $64.95)

Mission Critical In this sci-fi adventure, starring Michael Dorn (Worf on Star Trek: The Next Generation) and Patricia Charbonneau (from RoboCop II), you play a rebel fighter battling the oppressive United Nations. Luckily, you've stumbled upon a time portal to another planet. Mission Critical hits stores this fall. (Legend Entertainment; 800-658-8891; DOS CD, $59.95)

Netrunner Set in post-apocalyptic 2525, this cyber-horror game features the ultimate corporate takeover. Check out three hours of composited video as your character, the Netrunner, searches cyberspace for his father. It gets moving by the middle of the next year. (Interplay; 800-969-4263; DOS CD, not yet priced)

Phantasmagoria Things go

bump in the night after you move into the house of a deceased eccentric magician. On shelves now, this adventure game is the first cinematic effort from Sierra On-Line. In November, watch for the sequel to Gabriel Knight, **The Beast Within**, which also uses the Phantasmagoria engine. (Sierra On-Line; 800-853-7788; Phantasmagoria, Win CD, $69.95)

Ripper Enter a ghoulish mystery this November, when you try and track down a futuristic Jack the Ripper. Among other stars, you'll find Pulp Fiction's Christopher Walken. (Take 2 Interactive; 800-728-2532; DOS CD/Mac CD, $79.95, PlayStation, $59.95)

Santa Fe Mysteries You play a rookie detective working in the Santa Fe desert who's trying to crack a series of murders. You'll interview the locals, visit the crime scenes, gather evidence, and make arrests. It's due late this year. Look for the sequel Zork: Nemesis in '96 and an international spy thriller, **The Great Game**, at the end of the year on Windows CD-ROM. (Activision; 800-477-3650; Win CD, not yet priced)

Take 2 Interactive's Ripper puts you on the trail of a killer.

Silent Steel One of the first games from hardware maker Sigma Designs mixes video, strategy, and military simulation. It'll use Sigma hardware to achieve TV-quality video. The MPEG version is now available, with a Windows version due in September. (Sigma Designs; 800-845-8086; Windows, $69.95)

different union of film and game in Psychic Detective. Assistant producer Ric Neil says, "We went for the movie experience." He's right: If you feed all three discs to your computer, the whole story will play right through to its conclusion. (In fact, you just might want to watch it once before you play. This twisted murder mystery is sort of like Clue on LSD, and you may need help figuring out how to make psychic/entertainer Eric Fox jump into other characters' minds to solve a string of ghoulish murders.)

Neil says Psychic Detective uses groundbreaking video techniques to let it instantly switch videos and character perspectives. While Neil avoids calling Psychic Detective an interactive movie, he says it does come closer to this vision than previous titles: "It's not a flight sim with movie clips," he boasts. Indeed, apart from a traditional puzzle element at the end of the game, the

Legend Entertainment's Mission Critical stars Michael Dorn from *Star Trek: The Next Generation.*

entire experience is propelled by the player directing the psychic to jump from one character to another.

Game Show

Only time will establish the formula for successful video-based computer games. It is great game play with a sprinkling of cinema, or a terrific movie with some cleverly embedded game play? For now, most developers—even those like Fox Hunt's Adam Burns—agree that game play must come first.

So if you're a gamer who likes tradition-

al game play, look to the adventure and flight sim games that use video to introduce the plot, develop the characters, and heighten the game's sense of realism. These games—the Wing Commander series, The Pandora Directive and The 11th Hour, the sequel to The 7th Guest—offer real puzzle play or in-flight action, dressed up nicely in cinematic trappings. If you are more of a movie fan who wants something new, games like Psychic Detective and Fox Hunt are for you.

In the long run, though, full-motion-video games must create their own identity. As game designers discover the technological and artistic approaches best suited for immersing people in their interactive stories, games will no longer imitate movies.

Sierra's Williams puts it this way: "A new form of cinematic technique is going to evolve just for computer games." When that happens, instead of scrambling to live up to confusing labels like interactive movies, computer games that happen to use video will stand on their own as what they are: games. 🔡

CyBeRsPaCe: 1995

The online services have experienced a dizzying year of change and growth. What you'll find online today—and tomorrow.

I magine that you're a planet in a nice, quiet solar system, just orbiting away, minding your own business. Suddenly, the sun explodes. Miraculously, you survive, but things will never be the same again. You're part of that sun now, and the once-mild climate is scorching. And just as you get used to the heat, you look up to find a huge asteroid hurtling straight toward you. *That's* what it's like to be an online service in 1995.

Just a year or two ago, the online world was simple— and kind of sleepy. CompuServe led the pack, Prodigy had lots of subscribers (and lots of ugly ads to annoy them), and America Online (AOL), Delphi, and GEnie plugged away at their own mildly popular niches.

Today, everything is different: Millions of new users have hopped onto the online services, enticed more than anything by the promise of fun—celebrity chats, hobby forums, and pen pals. AOL led the charge with a year of explosive growth. **By Donald St. John**

Apple weighed in with its eWorld service, only to find out that online life wasn't going to be easy. And all of the services heard the footsteps of the stampede toward the Internet. Now, they're looking over their shoulders at Microsoft's promise to include its Microsoft Network in every copy of the Windows 95 operating system.

It all adds up to a radically changed landscape since February of last year, when *Electronic Entertainment* did an entertainment overview of the major online services ("Calling All Games," February 1994, page 72). But the turmoil is good news for online surfers. In a frantic attempt to court customers in this newly competitive environment, all of the services have added a deluge of entertainment content. They've scrambled to include access to the Internet, and especially the World Wide Web. Best of all, they've had to cut prices and increase access speeds to survive.

Things are still heating up, of course, but you won't get burned if you jump in now. To make it easier, we'll tell you what you'll find out in cyberspace right now: Which services make it easy to join, and which make it hard. What each service does well and where it falls down. And where to find the fun stuff—no matter where you log on.

The Big Three

America Online

AOL is still pinching itself to make sure it didn't just dream its way through 1994 and early 1995. The online service claimed 1.5 million subscribers on Christmas Day last year; a month later, it

The gateway to America Online, the most-added service last year.

had added a phenomenal 750,000 more. And the momentum is accelerating—as all your friends jump on the AOL bandwag-

on, you just might want to join them.

Unfortunately, AOL's phenomenal growth hasn't been without attendant problems. Increased congestion means that at times, subscribers are almost as likely to see the dreaded "For some reason, the host has failed to respond" message as they are the system greeting. AOL can get insanely crowded at peak times, badly overloading its service desk. And AOL users may still find themselves pariahs on the Internet. (AOL members quickly gained a reputation for ignoring Internet "netiquette"; in many newsgroups, any message posted from an address that ends in @aol.com is now marked as instant flame-bait.) And as AOL users swarm onto the World Wide Web with the service's new browser, you can expect significant performance slowdowns during peak usage hours. The company's new 'Net-only service, built on its May purchase of Global Network Navigator

(GNN), will also draw people to the Web.

Nevertheless, AOL is still the place to be. Content providers have scrambled to get on the service, which means that you'll find a host of cool stuff there. Magazine readers can enjoy online efforts from *Entertainment Weekly*, *Time*, *Spin*, and many more, while TV watchers can interact with NBC, ABC, MTV, and Comedy Central. Gossip hounds can get the daily dish from Geraldo Rivera and Ricki Lake; Keyword to their names. AOL's music resources are also focused and full. Look for them under the MusicSpace (Keyword: MusicSpace) bulletin board.

Gamewise, AOL has added a lot of game-developer forums (Gametek, TSR, LucasArts, Brøderbund, and others; Keyword to the company name). AOL also has specific forums for gamers—role-players, online gamers, and strategy fans will all find areas particular to their interests.

America Online

BETTING ON:	★	★	★	★	★
INTERFACE:	★	★	★	★	
CONTENT:	★	★	★	★	
SERVICE/RELIABILITY:	★	★			

Advertisement

Hey, check out the free INN software on the CD-ROM in this mag!

CompuServe

The CompuServe Information Service (CIS) has been No. 1 in the online game since the early 1980s, and the company doesn't plan to tinker too heavily with its winning formula. Broad yet deep content; unparalleled international access; a reasonably good graphical interface that CompuServe plans to improve even further; plus a reliable network and efficient service all help keep CompuServe—which still leads the subscriber pack with more than 3 million users—among the serious online players.

One area in which CIS (as it's often called by online habitués) hasn't tried to compete, however, is pricing. CompuServe still charges for incoming Internet e-mail, although it's cut those prices somewhat. And while it's added many more areas to its unlimited access "basic services," many popular CompuServe forums remain "extended services," and still charge you by the minute for time spent there. CompuServe's Internet pricing, while competitive, tacks on its $2.50/hour charge after just three hours, as opposed to five

hours on AOL and Prodigy. With the addition of a World Wide Web browser this past April, that could all add up to big charges for CompuServe Web surfers. (CIS does offer a plan for heavy users; see chart on page 51.)

The CompuServe Information Manager is still seen by more people than any other online interface.

On the content side, CompuServe has finally begun paying more serious attention to the gaming community. The service has added Action Games (Go action) and Video Games (Go video) forums, and has encouraged developers to join its four Game Developers areas (Go gamapub, gambpub, gamcpub, and gamdpub). You'll also find the latest shareware offerings in the Hot Games Download area (Go hotgames), as well as specific forums geared toward flight-sim enthusiasts, fantasy role-players, and modem gamers, among others.

Entertainment content on CIS is not just limited to games. In fact, CompuServe has a serious Tinseltown orientation, with Hollywood Online (Go flicks), the Marilyn Beck/Liz Smith Hollywood gossip area (Go beck), the popular online gabfest Stein Online (Go stein), and the Soap Opera Forum (Go soapforum), to name a few. CompuServe's music-based offerings are also quite robust: RockNet (Go rock) functions as a general-purpose music forum, while about 20 record companies lurk in the Recording Industry Forum (Go record). Visit the All-Music Database and Forum (Go allmusic), and you should be able to find answers to just about any music query you could dream up.

Advertisement

Surfing In Focus

For all the breadth of the major online services, there are still niches for smaller, more directed services. Two such niches are being filled by AT&T, which is testing AT&T Interchange, a business-oriented service that'll include *The Washington Post* and *The Minneapolis Star-Tribune*. Look for more offerings during its phased rollout this fall. The telephone giant also purchased the ImagiNation Network, one of the two premier game-oriented national nets, from Sierra On-Line last year. INN offers multiplayer gaming for role-players and flight-sim addicts (you can play Red Baron with someone 3,000 miles away), and it also has a kid's area, the Little Red Funhouse. Simple installation features (game software comes on the disks) makes it easy to get into. (ImagiNation Network; 800-462-4461; DOS/Windows; $9.95/month (includes five free hours), plus $2.95/hour; extended plans available)

MPG-Net, the other established gamers' network, recently expanded beyond its Kingdom of Drakkar game. Six new games, including Empire Builder, Minion Hunter, and Operation Market Garden, recently came online. MPG-Net has also added a graphical front end to its text-only interface, and has established a save-game feature. MPG-Net will be accessible through the Microsoft Network starting this month. (Multi-Player Games Network; 305-296-5996; DOS, plus Macintosh for Kingdom of Drakkar and MUD II; $4/hour access through national communications networks, $2/hour in the New York City area and over the Internet)

A pair of other national networks are currently in beta testing. TEN (Total Entertainment Network) will also feature gaming, including SimCity Online, the first multiplayer version of the classic simulation. The network backs up its games with e-mail, an innovative graphical Usenet interface, and other entertainment-oriented areas. The service is planned for a fall rollout. TEN recently strengthened its offerings by folding in Outland, an established Mac gaming bulletin board. (Planet Optigon; 800-867-8446; DOS/Windows; not yet priced)

MedioNet takes a different approach. Medio, best known for multimedia discs like The JFK Assassination and its monthly CD-ROM magazine, will link its CD-ROMs to its service. Buttons on topics in Medio magazine will kick you to Usenet newsgroups through a proprietary network gateway. Once you connect, MedioNet will offer full Internet access. The service, now testing in the Seattle area, is slated to go national later this fall. Medio also plans an interactive TV component in tandem with Microsoft. (Medio; 800-788-3866; Windows; not yet priced)   —DSJ

Prodigy

Prodigy may have changed more than any other service in the last 18 months. Once an insular (though huge), cluttered, dated-seeming online backwater, it today takes pride in calling itself "the world's biggest Internet services provider."

Two years ago, even less, such an idea

Prodigy released the first World Wide Web browser from an online service last February.

would have been unthinkable, but Prodigy won the race among the major online services to offer graphical World Wide Web access. Even with many of its members connected with modems too slow to surf the Web, the service claims to have picked up 250,000 new subscribers by getting there first. In May, Prodigy again beat its competitors to the punch when it began letting users mount their own personal Web pages. And, eventually, Prodigy plans to put all of the service's content on the Web, much of it through Prodigy's AstraNet home page.

The rush to the Web has helped Prodigy overcome two real stigmas—ads (it was the first service to carry 'em) and the ugliest interface this side of a Marlboro billboard. The company's sleek new P2 interface, due out by the time you read this, will make the ads smaller, uncouple them from Prodigy's own screens, and link them to advertisers' home pages on the Web.

The new interface won't affect Prodigy's lack of game content, however. Serious gamers won't find much of interest here; the "Galaxy of Games" offerings seem more like a meteorite full. (If you want to check it anyway, Jump games.)

The wholeheartedly mainstream Prodigy does better in general entertainment. For TV viewers, Prodigy is nothing short of fabulous: 33 different network or cable channels have areas, most with detailed program listings. And the movie, music, and theater areas all have active bulletin boards. Click on the Entertainment button in the Highlights area, then choose your category button from these.

Prodigy				
GETTING IN:	★	★	★	★
INTERFACE (OLD):	★	★		
INTERFACE (NEW):	★	★	★	
CONTENT:	★	★	★	★
SERVICE/RELIABILITY:	★	★	★	

The Contender

The Microsoft Network

Ready or not, here it comes. Bill Gates' crew has been tooling the Microsoft Network (MSN) for more than a year, and with the full release of Windows 95 due on the shelves now, one-click Internet access is going to be right there with it. The concept scares the pants off the other services—enough that they're eagerly cooperating with a potential antitrust probe of MSN by the U.S. Justice Department.

Not without good reason, either. The software giant has developed a service that looks great and boasts a raft of easy-to-use fea-

The Microsoft Network has a natural advantage over other services—an interface built into Windows 95.

tures. As long as you have Windows 95, that is; Mac and Windows 3.1 users are facing an indefinite wait to get onto MSN.

In some respects, MSN will advance the state of the graphical interface art among the online networks. Areas designed using MSN's Blackbird software tools achieve a graphical richness that will make other ser-

vices drool, although most content providers won't be able to deploy Blackbird-built environments until next year. The service also excels at instantly displayable pictures—even better and faster than the Netscape Web browser and America Online. And in a radical innovation, MSN lets you create a Windows icon for any World Wide Web link and drag it into a window or onto the desktop, then click on the icon to go directly to your favorite site.

The Network's pricing will also differ from the other services. AOL and CompuServe work on the pay-as-you-go principle, charging by the minute and sharing the proceeds with the content provider. MSN turns that model on its head. It plans to charge a small connect fee (undetermined at press time), and then let content providers determine their own prices for entrance to particular areas. Microsoft will then get a share of that.

MSN content offerings are off to a slow but sure start. Microsoft's own consumer offerings are there, of course. Services from former Microsoft co-honcho Paul Allen's Starwave include the popular ESPNet and Mr. Showbiz. Gamers will get easy access to the multiplayer gaming network MPG-Net

(see "Surfing In Focus" on page 50) through MSN, and other early consumer offerings include *U.S. News and World Report*, the *Seattle Times*, and the Women's Wire network. Microsoft also made its first raid on other systems in May, enticing NBC away from AOL and Prodigy. Look for more as the Network comes online.

Microsoft Network

GETTING ON:	★	★	★		
INTERFACE:	★	★	★	★	★
CONTENT:	★	★	★		
SERVICE/RELIABILITY:	★	★	★		

The Sleepers

Delphi

For the want of a nail, Delphi's potential kingdom may have been lost. Delphi Internet Services has some key advantages, including a core of committed users, and substantial backing from Rupert Murdoch's and now MCI, plus content from Fox and Murdoch's many other communications holdings. Even better, it had full Internet access light years before everyone else—gopher, telnet, text-based World Wide

Web, the whole deal. Its Internet support is still unmatched among online services.

What it's never had is a graphical interface. And Delphi *still* doesn't have one, which is why the Big Three have gobbled up new subscribers while Delphi muddles along with its core of 125,000 members.

The problems aren't from lack of trying. Delphi worked on a graphical interface for nearly two years, only to scrap it last year after a management shakeup. The situation should finally change soon. Delphi has cut a deal with Netscape—the current god of Web-browser firms—to integrate its browser for easy World Wide Web dial-in and access. And Delphi says its new graphical interface, slated for this year and in beta testing now, will be built on Internet-friendly standards.

Once Delphi gets graphical—and even now—there's no lack of fun stuff to discover. Start with forums devoted to two of TV's most popular shows, the creepy *The X-Files* and the lurid *Melrose Place*. Delphi is also the official online site for the Rolling Stones. And the service competitively supports the gaming community. Among other things, it was the first place where gamers could find the shareware version of Descent. Counting Delphi out of the online game battle would be a mistake, but there's little question that 1995 is the year that it either changes the face it presents to the public or does a slow fade.

Delphi

GETTING ON:	★	★			
INTERFACE:	★				
CONTENT:	★	★	★		
SERVICE/RELIABILITY:	★	★	★	★	

GEnie

GEnie is another service that found itself stuck in first gear while AOL rocketed forward. In 1994, the service lost more than half of its membership, falling from a high of 200,000 to the current 75,000.

While rumors have flown that GEnie will take some different shape or be broken into market-specific pieces, the service hasn't sat idle. Last April, it slashed prices and introduced a graphical interface. New users still need a terminal application such as MicroPhone or ZTerm to join GEnie, but it's easy to download the interfaces once you're on the service. Also, GEnie offers a full raft of Internet services, lacking only graphical Web access. The company says that will roll out later this year.

GEnie doesn't skimp on entertainment content, either. It features multiplayer games such

Who's Got What?

Service	Prices	Top speed	Internet access	Why should I log on?
America Online 800-203-3200	$9.95/month (includes 5 free hours), plus $2.50/hour	28.8 Kbps through AOLnet (Keyword: AOLnet); 14.4 Kbps otherwise	e-mail, Usenet, FTP, gopher, World Wide Web	Fully stocked, easily navigable service that probably includes your friends
CompuServe 800-848-8990	$9.95/month plus fees; $24.95/month for Internet Club	28.8 Kbps in selected cities	e-mail, Usenet, FTP, telnet, World Wide Web	Chock-full of content, totally reliable, and the most international of all the services
Prodigy 800-776-3449	$9.95/month (includes 5 free hours), plus $2.95/hour	14.4 Kbps	e-mail, Usenet, World Wide Web	Sharper looking now, and the easiest way to access the Internet
Delphi 800-695-4005	$10/month (includes 4 free hours), plus $4/hour	9600 bps	e-mail, Usenet, FTP, gopher, telnet, World Wide Web (text-only)	Cool entertainment offerings, but wait for a graphical interface
GEnie 800-638-9636	$8.95/month (includes 4 free hours), plus $3/hour	9600 bps	e-mail, Usenet, FTP, gopher, telnet, World Wide Web (text-only)	Good for gamers, but in flux; wait on this until they figure out where they're going
eWorld 800-775-4556	$8.95/month (includes 4 free hours), plus $2.95/hour	14.4 Kbps	e-mail, Usenet, FTP, World Wide Web	Good Mac interface, needs more content, Windows interface, Internet connections

as Island of Kesmai, BattleTech, Stellar Emperor, and Orb Wars, and recently cut a deal with Interpay to mount a multiplayer version of Descent with new features. (For more information, see Game News, page 58) And GEnie's "roundtable" forum areas are still robust, particularly the ones dedicated to music, comic books, and sci-fi/fantasy topics. As for GEnie's long-term future, stay tuned.

The eWorld village is friendly, but still fairly unpopulated.

GETTING ON:	☀			
INTERFACE	✱	✱	✱	✱
CONTENT:	✱	✱	✱	
SERVICE/RELIABILITY:	✱	✱	✱	

GEnie

eWorld

This service opened in June 1994 to great fanfare—and then faced serious critical brickbats as people discovered Apple's great Mac-only interface didn't connect to a lot of content. Apple's newly upgraded eWorld software is slated to include Windows support before the year's out, but the company still hasn't figured out how to make it easy to sign up. Unless you buy a new Mac and get it pre-installed, you *have* to mail away for eWorld connection software. Thus, with 80,000 subscribers, eWorld remains a bit player in the online world.

For those who do venture into Apple's nest, the experience resembles hooking up to AOL. Once in, the interface is easy to understand and navigate; you start at the "town square" and move to various areas by clicking on the appropriate buildings or folders in the animated townscape.

Unfortunately, ease of use isn't always enough. Entertainment buffs will find a sparse collection of offerings. The game area offers a few developer forums and some multiplayer games, but you won't find even the biggest PC shareware hits like Doom and Descent. Music fans fare better; they can peruse a fairly active library of offerings from more than 20 record companies, including Atlantic and Rykodisc. Similarly, there are movie- and television-based zones on eWorld, but nothing you can't find in more depth on other services. And Apple only added Internet access last July, well after all the other major services. In short, Apple has plans for eWorld, but it still has some catching up to do.

GETTING ON:	✱	☀		
INTERFACE	✱	✱	✱	✱
CONTENT:	✱	✱	✱	
SERVICE/RELIABILITY:	✱	✱	✱	✱

eWorld

TOP GUN

Fire at Will

The blockbuster 1986 movie *Top Gun* had something for just about everyone: fast-paced aerial action, drama, romance, cool tunes, and hot actors, including Tom Cruise, Val Kilmer, and Kelly McGillis. Now, almost 10 years later, Spectrum HoloByte hopes to revive the movie's legacy with Top Gun: Fire at Will, a PC flight sim designed for mass appeal.

By Steve Klett

The game's storyline picks up more than midway through the movie, with you playing Tom Cruise's

Maverick role—a "loose-cannon" pilot with a severe disrespect for authority—at the stick of an F-14 Tomcat. You start out at the Fighter Weapons School to compete for the Top Gun trophy, and then get swept up in a series of 40 combat missions in Cuba, Korea, and Libya. Your goal is to cool off these hot spots with some hotter flying and, ultimately, to survive.

Fire at Will features a combination of new and original movie footage along with high-resolution

Climb into the cockpit of this unique new mass-market flight-sim that brings the Hollywood touch to the unfriendly skies.

Winning the Top Gun trophy is nice, but it's only the beginning.

Time to spill some coffee.

3-D graphics and a fresh soundtrack. Automated radar operation and wingman orders make the game a breeze to get into for novice PC pilots. At the same time, Spectrum hopes Fire at Will's realistic flight model will appeal to experienced flight-sim fanatics.

True to its Hollywood roots, the game features a cast of more than 20 characters, including actor James Tolkan, who reprises his role as Hondo, Maverick's cigar-chomping commanding officer. The

well-shot video cut scenes and some 4,000 lines of dialogue propel the plot and capture the feel of the original *Top Gun* movie. However, the movie elements are not interactive; you are only a witness to the onscreen action.

Fire at Will should be on store shelves by the time you read this. If you don't want to crash and burn, strap yourself into the cockpit for our exclusive Guided Tour mission briefing. (Spectrum HoloByte; 800-695-4263; DOS CD, not yet priced)

GUIDED TOUR

Hondo's always in your face, but you know that's just because he cares. Be sure to get the lowdown from him before you fly; it just may save your life.

Keep winning, and everyone's happy. Have you got what it takes to get the job done?

This guy's always showing up on your radar to cause you trouble. Eventually, you'll have to take him out, but before you can do that you have to figure out who he is.

SELECT ARMAMENTS:
MAXIMUM STAND OFF

INTERCEPTION

CLOSE RANGE

RECONNAISSANCE

TAKE OFF

Before takeoff, make sure you've got the right tools for the job at hand. Choose from three different air-to-air weapon arrays—or select the recon array.

Once in the air, use the external view to check out the scenery; you'll still have all the vital info you need to keep from becoming a wall decoration.

MIG-21 'FISHBED'

EXIT   **NEXT**

Manipulate 3-D views of enemy aircraft and check out their speeds and feeds. Then apply what you learn in the skies.

Taking off's a breeze, but landing is another story. Patience and a gentle hand are the key to avoiding a fiery death. If you're a real wimp, turn on the automatic pilot.

These windows don't pop up automatically—you call them up by pressing a key. This easy access makes keeping track of the action a snap.

LBS NEWS

Simulated newscasts warn of trouble spots around the globe. Your job is to settle them down.

Doctor, the patient is bleeding profusely from a gunshot wound. He's losing consciousness. His blood pressure is 80 over 18. Should you operate? Give CPR? You have 60 seconds to save his life.

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fun & games dept.

The emergency room of Legacy™ Memorial Hospital has hired a new doctor: you. Emergency Room CD-ROM uses real actors in a photo-realistic setting, with over 35 minutes of full-motion video, 14 exam tools, 20 lab tests, and X-rays for every part of the body. It's the most realistic medical experience you can have without malpractice insurance. Check out Emergency Room on the Internet at http://www.cdrom.ibm.com. To order, visit your local retailer or call 1 800 426-7235 (source code 5210).

IBM

GAME

Let's Go Dwango

Dwango takes Terminal Velocity online.

Get ready for **Dwango**, a new gaming network coming soon to a city near you. Dwango (Dial-up Wide Area Network Gaming Operation) promises to deliver the fastest, most up-to-date multiplayer games across the nation, 24 hours a day. Currently, Dwango has established a dozen game servers in major metropolitan areas of the U.S. and Canada—including New York City, Chicago, Dallas, Montreal, and San Francisco—with more franchises due to open up every month.

Right now, players can join in on four- to eight-player games of Doom, Doom II, Heretic, and Terminal Velocity, and the company says its proprietary routing technology ensures play that is equal to or faster than regular, non-network games. Dwango has not set a minimum modem-speed requirement, but your modem will have to meet the demands of each game, most likely 9,600 bps or faster. To ensure that you are not slowed down by another player with a slower modem and computer, players will match up with opponents with similar hardware in the service's chat room.

Ultimately, Dwango wants to connect all its local servers into a single worldwide network, allowing players to test their skills against other competitors around the globe.

Don't own the game that you want to play? You can easily download a copy from Dwango's site on the World Wide Web (http://www.hti.net/dwango/welcome.html) or BBS (713-467-9272) along with the Dwango client software you'll need to log into the service. If you already own the latest version of the games, you're ready to roll; just direct your computer to dial up Dwango's local access number. After a $20 one-time entrance fee, you buy play time—$20 for 10 hours or $35 for 20 hours—for games in your local area. If you want to play a Deathmatch with someone across the country, you need to connect to a separate server and pay $10 an hour. So you can try before you buy, Dwango makes the first 30 minutes of play and the chat room free. (Dwango, 713-467-0405; PC, upfront $20 fee, $20/10 hours or $35/20 hours)

Dwango isn't the only multiplayer game in town. (For more on gaming networks, see "Surfing In Focus," page 50.) GEnie has inked a deal with Interplay to develop two titles for GEnie's multiplayer game service, including an enhanced version of Descent that includes new game variations, such as capture-the-flag, a pair of new hover-crafts, and a new level available each week. GEnie has also closed an exclusive deal with MicroProse for a multi-player version of Magic: The Gathering. Multiplayer mavens should look for both on GEnie this month. (GEnie; 800-638-9636; PC/Mac, $8.95 a month, $3 per hour with $2 surcharge between 8 a.m. and 6 p.m.)

—Bill Meyer

Scouting Report
Game News You Can Use

Virgin's Orbital Studios is hard at work on an exciting strategy and space simulation game called **Alien Alliance** for DOS CD-ROM, due by the end of the year. The game features strong graphics, two different terrain engines, and the ability to graduate from wingman to fleet commander in an intriguing conflict between several alien races.

The long-awaited add-on disk to U.S. Navy Fighters, **Marine Fighters**, is available now from Electronic Arts with a new 35-mission campaign involving a conflict between the U.S., Japan, and Russia. As a Marine aboard the carrier *U.S.S. Wasp*, players have a choice of three new Vertical Short Take-off and Landing (VSTOL) planes including the

the U.S. Marine AV-8B Harrier II.

Trekkers should watch for Viacom New Media's **Star Trek: Deep Space Nine Harbinger**. Explore the world of *Deep Space Nine*, as a Tirrion delegate in the Gamma Quadrant. It's due out in the fall.

Virgin Interactive's Alien Alliance mixes simulation with strategy.

Mac users, rejoice! LucasArts is releasing **Full Throttle** and the **X-Wing Collector's CD-ROM** for the Macintosh in September. PC users, meanwhile, can look for the **TIE Fighter Collector's CD-ROM**, featuring

the original game, the Defender of the Empire add-on disk, and 22 new missions.

Fist-fighting fans should watch for 47 Tek's **Team 47 Goltan** in November for DOS CD-ROM. Meanwhile, Mirage Technologies, makers of Rise Of The Robots, will ship **Rise 2:Resurrection** for the PlayStation, Saturn, 3DO, PC, and Mac in the fall.

Epic MegaGames has released a modem/network upgrade disk for its robotic arcade fighting game **One Must Fall 2097**. Also in the works is the space-age action shooter **Tyrian**, and **Extreme Pinball** scheduled for fall on DOS CD-ROM.

To compete with the Saturn and PlayStation, **Panasonic** and **Goldstar** have reduced the price of their 3DO Multiplayers to $299.

DWANGO

I saw her future when I read the box.

There I was, in this computer store,
coming to an exciting realization.
The multimedia kit in my hands
was far more than the latest
and greatest computer technology.
This was a learning rocket.
Video, animation and sound that will
take my daughter on a NASA trip to
Jupiter, let her experience the power
of Kennedy's inauguration speech,
and teach her about interest rates and
the Dow Jones. My head was spinning,
thinking what all this could lead to.
A ceremony I'd give the world to see.
What kind of people design this stuff?

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Reveal upgrades) are available at most major computer
retailers. To learn more about us, visit our Web site at
http://www.reveal.com

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FX Fighter

By Christopher Lindquist

PC fight fans, get ready to rumble! FX Fighter has entered the ring as the reigning champ of polygonal PC fighting games.

Although FX Fighter still doesn't scale the heights of the top arcade and CD-console slugfests, its graphics and action beat the stuffing out of most other computer offerings. If you've got the horsepower, you won't be disappointed by this mauler.

Distributed by GTE Interactive, FX Fighter is the first computer game to use Argonaut Software's Brender 3-D technology, which allows faster, smoother action on the PC. The result is realistic character movements as the tough guys (and gals) work through more than 40 standard and special attacks each. Like any good 3-D fighting game, the camera perspective smoothly flows in and out to follow the action.

Also like any good fighting game, this one has a story, which is spelled out nicely in a small full-color comic book that serves as the game manual. Seems an interstellar maniac named Rygil has arrived in his mobile planet and is challenging all comers to hand-to-hand combat. If the contestant wins, Rygil will hand over all of his planet-busting power. If the challenger loses...well, let's just say that he won't have to worry about going home—even in a body bag—because home won't be there any more.

Players choose their character from eight different races, each with varying strengths, weaknesses, and special moves. The feline Ferans are cat-quick, for example, while the tougher, slower Magmen can take an amazing amount of punishment. Once you choose, you must fight your way through all the other contestants until you face Rygil himself. Beat him, and the galaxy is yours.

Once you begin play, FX Fighter sounds great and looks even better. A high-energy, CD-quality soundtrack plays right off the disc as you kick and punch your way through the game. The grunts, thumps, and shouts of the characters add an extra level of entertainment.

Visually, on a powerful Pentium-based PC, the texture-mapped—if somewhat blocky—polygonal characters and sharp, colorful backgrounds make this PC game look as good as some Saturn and PlayStation titles. Players with slower machines can turn off the shading and

reduce the level of detail to keep things moving quickly.

FX Fighter stumbles a bit only when it comes to response time. PCs have never been known for lightning-fast joystick-response times, and that lag shows here. The characters run, jump, spin, kick, and punch realistically in response to your keyboard or joystick commands, but getting them to perform their special moves can be frustrating. Becoming a expert dealer of death and destruction takes tons of practice and a little luck. Of course, you can always use the keyboard, but who wants to play a fighting game with a keyboard? If things seem too tough, you can adjust the computer's skill level anywhere from wimpy to unstoppable.

Once you get used to FX Fighter's generally impressive game play, you will notice the occasional quirk. Sometimes you'll get credit for hits even though the characters appear to be too far away from each other to have connected. And while FX Fighter is certainly well executed, there's really nothing new here. You still fight in a ring, and if you're knocked outside its boundaries, you hear the familiar call of "Ring out!" while your opponent chalks up another win. Lose the match, and your opponent taunts you—verbally, and with emotion.

FX Fighter may not replace the hottest stand-up arcade games—or even match up to fighters on Saturn, PlayStation, and 3DO—but it's by far the best 3-D fighting game to find its way to the PC. Just think, your fancy $2,000 computer can now almost keep up with a $400 game machine!

Rygil's tough enough to keep anyone on his toes—or on his back.

Sheba's kicking up her heels, and Venam's going down.

Siren's telekinetic lift does some serious damage.

TIPS
• For Cyberi's Shocker, hit Forward and Punch at the same time while close to your opponent. • If you're knocked down and want to avoid being hit again, tap Forward or Back rapidly to quickly roll toward or away from your opponent. • The computer's artificial intelligence will let you use the same move over and over until you win. That means a flying jump kick (Forward and Up, then Kick) may be all you need to complete the entire game. • Want to control the camera angle yourself? Hit the Home key during a match and use the arrow keys to move around, then the Page Up/Page Down keys to zoom.

PREVIEW

Fade To Black

By Steve Klett

ADVENTURE

After discovering his identity and foiling an alien plot to take over the Earth in Delphine's hit action/strategy game Flashback, Conrad B. Hart was feeling pretty damn good about himself. Like any good action hero, he'd kicked butt—and plenty of it. However, unlike many heroes, Conrad didn't get the girl and live happily ever after.

Conrad goes airborne and rests his weary feet in this level.

After a tough fight, nothing's better than a re-energizing terminal.

Instead, Conrad finds himself out of the frying pan and into the fire. Fade To Black, an action/adventure due to hit store shelves this fall, picks up where the original left off in terms of both plot and technology. The new game begins as Conrad enters cryogenic sleep for the long journey back to Earth. However, the Morphs—an evil alien race that possess the ability to change into any form—intercept Conrad's spaceship and imprison him in a massive Lunar detention complex.

Conrad goes face to face with some Morphs.

Escaping his cell is a snap—with the aid of a small contingent of human rebels bent on overthrowing the aliens. From then on, however, players once again assume the role of Conrad—clad in his familiar brown leather jacket and blue jeans—as he joins the rebels in an effort to uncover the Morphs' secret and destroy the sinister race once and for all.

Precise aim and nimble feet are vital for success.

On the technology front, Fade To Black bursts the two-dimensional, side-scrolling perspective of its predecessor to emerge into a massive 3-D environment seen from multiple camera angles. The result is a surprisingly effective blend of Doom and Ecstatica.

However, unlike Ecstatica, Fade To Black won't have you banging into walls every time the camera angle changes. Fade To Black's fly-on-the-wall perspective works, thanks to a myriad of user-selectable viewing angles. For example, if you're continually banging into walls using the default view from directly behind Conrad, you can switch to a side or front view at the touch of a key.

This system really shines during gunfights. You aim Conrad's blaster from an over-the-shoulder perspective as he crouches and fires away—unlike, say, Alone in the Dark, in which the ever-changing angles make shooting anything a matter of blind luck as much as skill.

The variety of views also gives you a better look at the game's outstanding images. Fade To Black features three different types of 3-D graphics: static, texture-mapped backgrounds for such objects as walls, boxes, and barrels; dynamic 3-D interactive objects, including computer terminals and cabinets; and a variety of mobile Morphs and robots to blow away. You'll also see some cool background effects, including water leaking down corridor walls and "living" textures that add a psychedelic feel.

Fade To Black comprises six large levels, each with several sublevels. Every one has a task for Conrad to complete, which may require completion of a series of smaller missions. An electronic inventory keeps track of the various items Conrad can pick up along the way, including special bullets and grenades.

High-resolution, cinematic cut scenes tie Fade To Black's levels together. These imaginative cinematics also portray the multitude of ways Conrad can die. They're so good that you'll find yourself triggering traps just to see what happens. A unique but easy-to-understand options screen lets you replay any of the cut scenes you've already seen.

Not surprisingly, all these goodies require plenty of juice. Break out the Pentium if you want the highest level of detail and performance. If you've got a 486, you'll find three detail settings to suit your requirements.

You may have to practice for a little while to get used to the game's changing perspectives and 3-D world, but it's worth the effort. Our pre-release version of Fade To Black gave every indication that this could be one of those burn-the-midnight-oil games that will have you up all night saying "I'll hit the sack—after I see what's around the next corner."

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For PC and Macintosh CD-ROM.

COMING THIS FALL.

STRATEGY

Celtic Tales: Balor Of the Evil Eye

By Steve Klett

Construct new weapons and start trade caravans in the Burg.

Visit visiting champions to hone your battle skills.

The land of Eire lays in waste, and the dreaded Balor and his Fomor army rule its downtrodden citizens with an iron fist. Thus begins your turn-of-the-first-millennium stay in Celtic Tales: Balor of the Evil Eye.

This strategy/simulation game from KOEI casts you as one of eight fictional characters ruling a small tribe of Celts. Your task? Unite the land's 18 tribes, become High Ruler of Eire, and, finally, take on Balor himself.

Don't despair—you won't fight alone. You'll have the skills of various Champions at your beck and call. Put them to work on everything from farming to cattle rustling. Fortunately, ordering Champions around requires just a few simple mouse clicks.

Winning the game will require a lot of those simple clicks, however. To build up enough strength to attack Balor, you must first win the trust and support of neighboring tribes. You do that by giving tribute in the form of grain, wood, cattle, or metals. Of course, you have to accumulate these materials first through the sweat of your Champions' brows. Once on friendly terms with your neighbors, send a trade caravan to the province and try to recruit other Champions to join your cause.

Cultivate your tribe's province to stockpile resources for war.

Being a nice guy doesn't always work, though. And if a province won't bend to your will through bribery, you'll have to try the more direct approach: war. Defeat a province in battle, and

you win all of its resources as well as a chance to recruit its Champions. But be warned: If you are killed or captured in battle, it's game over.

Celtic Tales is turn-based, with each turn representing a month's passage. You have 70 years to unite the land and defeat Balor. Fail, and the tribes of Eire remain slaves to the powers of the Dark for all eternity. Seventy years may sound like plenty of time, but having to attend to every little detail from constructing weapons to tending your cattle makes it pass quickly.

Unfortunately, the game's sound—or lack thereof—can make it seem like time is standing still. There are no sword clashes in battle or background sounds such as birds singing or cattle mooing. Sound effects are limited to cheesy background music and a beeping sound reminiscent of a stuck keyboard as characters move around the screen.

There's no arcade action to pass the time, either. To fight, you move your characters and choose an action, such as attack or defend, and then sit back and watch the outcome.

To help things along, your Druid and Bard Champions can cast various magic spells with the aid of wooden and stone runes. Wooden runes break after one use in battle, however, so to be successful you must search the far corners of Eire for powerful stone runes, which you can use over and over.

You'll also want to practice your spell casting before the final battle with Balor, as the only way to discover most of the spells is through experimenting with different rune combinations. For a price, you can occasionally convince traveling Bards to share a few of their spell-casting secrets, but trial and error is more cost-effective.

If you can deal with the annoying soundtrack, Celtic Tales: Balor of the Evil Eye mixes a compelling storyline with a challenging blend of strategy, simulation, and role-playing. And after all, you don't want to leave the tribes of Eire suffering in slavery for all eternity, do you?

TIPS

● Save before you go into battle. If you lose, all your hard work could go down the drain.

● Balor's minions show up intermittently to collect taxes. It's tempting to ignore them, but it's better to pay up at once.

● Jot down the rune combinations for each spell you discover. The game does not keep track of them.

● Ruling is tough. Listen and learn from the advice of your council and personal advisor.

● Break up the monotony of chores for your Champions with an occasional game of hurling; the skills they develop will help them out in battle.

Celtic Tales: Balor of the Evil Eye

KOEI
415-348-0500

Platform: DOS CD
Requires: 386, 8MB RAM, DOS 5.0
List Price: $59.95

GAME PLAY:	★	★	★
GETTING STARTED:	★	★	★
GRAPHICS:	★	★	★
SOUND CHECK:	★		
VALUE:	★	★	★

Celtic Tales: Balor of the Evil Eye mixes an intriguing storyline with well-designed game play.

Mac • Power Mac

FLY & DRIVE

F/A-18 Hornet 2.0

By J. Daniel Jones

The radio finally crackled to life: "Hornet One, you are cleared for take-off." Revving the engines to 75%, I released the brake, and the bird leapt onto the runway. I punched in full afterburners, and was doing 225 mph before I hit the halfway mark. Pulling up into a screaming left turn, I leveled out just as a flock of MiGs blipped onto my radar screen.

I dove for the deck as my Sidewinders sped toward the bandits. The bomber, my primary target, was just coming into range. A smile crossed my lips as I prepared for the kill. But the rat-a-tat-tat of impending doom wiped the grin from my face. I looked back and saw a smoking MiG-21 pouring tracers into my bird.

"Engine Left, Engine..." said the voice, but she never got the last word out as my Hornet exploded across the lush green landscape of North Korea.

Sound like fun? It is. And it's also perhaps the most anticipated game release in Macintosh flight sim history: Version 2.0 of Graphic Simulations' F/A-18 Hornet and the new Korean Crisis mission add-on. The new Hornet comes as a "fat binary," so if you've got PowerPC horses under your hood, you'll get an extra dose of graphics detail and speed. If you're running a pre-PowerPC system, Hornet will still have all the new features, such as voice messages and enhanced instrumentation, as well as much of the improved scenery detail (outside views of the aircraft even show a pilot in the plane).

F/A-18 Hornet 2.0 and the Korean Crisis add-on seem to have been on the verge of release forever. According to the developer, the delays kept coming as the programmers sought to add ever-more features. What was just going to be a minor update of the sim with PowerPC compatibility turned into a whole new version.

The new Hornet contains great modifications as well as some entirely new features to enhance the experience. If you can devote 6MB of RAM to the game, you can access the new voice communications, which not only add to the realism but actually provide some helpful information. If you hear the Landing Signal Officer of the carrier yelling "Bolter, Bolter!", you had best hit those afterburners PDQ, or you're going to take a bath.

And many of the other improvements are the result of actual jet jockey suggestions, including fast-er acceleration and jet exhausts that glow cobalt blue.

Once you're done with the 28 Kuwaiti-theater missions—the same ones found in the original Hornet—the Korean Crisis adds another 28 sorties, such as taking out an enemy dam (the resulting flood is stupendous). If you already have the original F/A-18 Hornet, don't bother buying the full edition of 2.0. Instead, you can just buy Korean Crisis to automatically upgrade.

It all adds up to some serious excitement. As I was coming in for a carrier landing in the early evening dusk, the dying sun sparkled over Inchon Harbor. The carrier's landing lights stood out in bright contrast to the dark waters. The wheels yelped as I hit the deck and I was yanked to a stop in an impossibly short space. As I raised my hands in triumph, an involuntary shout of glee escaped from my lips. This one was worth the wait.

GAME PLAY:	★	★	★	★	★
GETTING STARTED:	★	★	★		
GRAPHICS:	★	★	★	★	
SOUND CHECK:	★	★	★	★	
VALUE:	★	★	★	★	

Better graphics and more realistic flight characteristics improve an already excellent game. F/A-18 Hornet 2.0 is the graduate school of Macintosh flight sims.

A-10 Attack!

By Anthony Lukhin

FLY & DRIVE

These are only half of the instruments in A-10's cockpit.

For flight sim fans, nirvana is screaming along 50 feet above the treetops with your GAU-8/A Gatling spitting dozens of 30mm depleted-uranium armor-piercing shells per second into a column of heavy tanks. For Macintosh flight-sim addicts, nirvana has finally arrived with A-10 Attack! from Parsoft.

This full-bodied flight sim doesn't limit you to just torching tanks with your GAU-8/A. Feel like pointing that behemoth of a gun at a ship? A plane? A building? Go ahead. You have total control of the Gatling and a bevy of bombs, not to mention a wide variety of air-to-air and air-to-surface missiles.

Don't worry, though, this isn't a shoot-'em-up disguised as a flight sim. In A-10 Attack!, the aircraft fly with unparalleled realism and authenticity. Your A-10A Thunderbolt close-support aircraft (affectionately known as the Warthog) can—and will—stall, spin, feel the weight of wing loading depending on the armament you've selected, and react realistically to wind conditions. Ever try landing a heavily laden aircraft in a 20-knot crosswind? Here's your chance.

Parsoft's "advanced physics model" lets your A-10 interact convincingly with other solid objects in its virtual world. Land on the top of a hill and taxi down, then watch the suspension give when you bank on a turn and bounce when you brake. Nudge the wing of another A-10 while flying, and you get to see the other plane move accordingly. While you're at it, try the great details such as moving flaps, ailerons, and rudder, steerable nose gear, and active undercarriage armament. The gear even bends and breaks if you abuse it too much.

The details carry through to dozens of active controls in the cockpit. Use the mouse to rotate knobs, push buttons, flick switches, and pull handles—operating everything from weapons systems to fire extinguishers. The huge array of working dials and buttons may seem overwhelming at first, but they add to the experience once you get used to them.

If all this sounds similar to another great Mac flight sim, F/A-18 Hornet 2.0 (see review, page 66), there's more to it. In A-10 Attack!, Parsoft introduces the Virtual Battlefield Environment (VBE). The VBE lets you make all the decisions for all aircraft in the game's eight built-in ground-attack scenarios-set in a rebellion-torn Germany.

A tactical map lets you oversee the entire mission theater. All combatants are represented on-screen by colored "chits" that identify vehicle type and country of origin. From the map you can create waypoints, determine weapons loading, and specify tasks to execute at any altitude, speed, and time for all friendly aircraft. Then you can jump out to the battlefield and watch what happens until the cavalry arrive from above. Once the planes show up, jump into the cockpit and give 'em hell.

Not only that, the VBE also acts as a series of plug-ins that will, in future versions, give you the option to take control of other tools of destruction, such as tanks, choppers, warships, and possibly even soldiers with portable SAMs. Parsoft also plans to add new missions to the relatively small number of scenarios and make them available for purchase by the holidays. Oh, did I mention that networking support is due—free to registered users—by this fall?

The tactical map uses chits to let you control all friendly aircraft.

Fire your AGMs first, then the bombs, and finally your lethal GAU-8/A Gatling gun.

STRATEGY

Your *Saker MkIII* is a good all-purpose beginner ship.

First Encounters

By John Sauer

Sometimes you hope a certain game will be full of things to love, but instead you find nothing but disappointment. Such is the case with First Encounters, a UK import from Gametek.

Set as a sequel to its 1993 award-winning Frontier: Elite II, First Encounters carries high expectations. But mediocre

Interstellar police are the rudest folks you encounter at spaceports.

After you've hyperjumped, the autopilot locks you on to a selected port.

graphics, an awkward control interface, annoying sound, and a 140-page manual as mystifying as some science fiction novels all put this one in the middle of the pack.

First Encounters starts off with a good premise. As the commander of a one-man starcraft, you begin by trading goods between colonies, with ample opportunities to build your fortune by dealing in legal—and illegal—substances. You also run missions for private citizens and join the

military. As is the way with such economic/space sims, you make some credits, upgrade your ship, get into trouble, have some fun, fight bigger and better battles, and encounter aliens somewhere down the line. Unlike some other sims, First Encounters is openended, so there is no winning objective. It's like life: Go wild and see where it leads you.

The game is heavy with options and features. You can upgrade your weapons and ship as you make your fortune. Each colony you trade in has its own government and economy (the police in Lexington port are always open to bribery, for example), and possibly even wars. Such complexity does call for a big manual, although the one for this game could certainly be better designed. Gametek also includes a collection of quite good short stories that take place in the First Encounters universe and provide some clues about how to proceed.

Sad to say, the whole package just doesn't fly. The graphics are pixelated and worse than most 16-bit console games, and PC gamers deserve better. The music, while sometimes cool, can get very plinky. Sound effects are similar. For example, the "battle alert" is so annoying that it won't be long before the whole neighborhood is asking you to turn it down. Fortunately, the game options let you do just that.

When it comes to game controls, in-station functions are fairly simple and accessible via mouse-clickable icons. The autopilot can help keep things under control while you fly, but when you go manual, steering the ship and locating enemies in combat becomes a wrist-numbing experience.

The game can also be computer-numbing. We ran the title on two different Pentium 75s and experienced noticeable slowdowns at times. Such performance problems certainly don't help a below-par game.

While First Encounters does have good core game play, you'll have to endure poor features to discover it. In a world that desperately needs "A" titles, this one rates a "C."

SIMULATION

PowerHouse

by Barry Brenesal

All the news you can use. But the video is still annoying.

The most costly modern wars are not fought on battlefields, but in corporate boardrooms. Understand this and you'll realize why the 21st century conflicts in Impressions' latest simulation, PowerHouse, concern economic and strategic battles between megacorporations vying for the dwindling energy resources of the world.

You enter the game as the CEO of one such organization, competing against three other conglomerates. Your short-term PowerHouse goal is easy enough to define, yet difficult to achieve: Find more efficient ways to produce electricity from nine different energy sources, including oil, nuclear, and geothermal.

To accomplish these objectives, you must survey United Nations-designated energy sites and cut deals with different governments based on survey-team findings. Then it's on to building structures, monitoring energy production, transporting electricity, and researching better technologies.

Oh, about those governments: They're not always friendly, and even accommodating regimes are not necessarily stable. Local leaders may have a penchant for nationalizing industries, a euphemism for simply grabbing control of your facilities. Other rulers may simply renegotiate your contract without warning. And even friendly officials may frown on slipshod environmental records in favor of cleaner, safer competitors.

Pay careful attention to your stats.

Your long-term goal, of course, is to monopolize the world's energy supplies. There are "legitimate" ways to achieve this, and in PowerHouse, as in the real world, there are dishonorable methods as well. For example, you can sabotage an opponent's production site, steal technologies, bribe territorial officials, falsify survey reports, and slander your competition. Such tactics may succeed, or you may end up at the receiving end of the nastiness. In the worst-case scenario, the UN will castigate you in public, causing various world governments to spurn your subsequent bids.

Visually, PowerHouse is a charmer. This Windows-based Super VGA game bears some resemblance to the isometric perspective of SimCity 2000, complete with distinctive icons, cascading menus, plenty of optional overlays, and easy-to-analyze reports. The high-quality photographs, music, and speech are well-chosen to suit the game, though the full-motion video is (as with so many games) noninteractive fluff that adds no atmosphere and just gets in the way. PowerHouse defaults to a standard Earth map, but you can generate random continents if you'd rather try something new.

Given the complexity of the game (with more than a dozen different icons to click), a few online aids would have really helped. For example, it's hard to remember the function of all the icons, so a status bar displaying each one's effect as you scroll across it would make the game easier to play. And Windows games have no excuse for not implementing Windows-based context-sensitive help.

Once you figure out what's happening, though, PowerHouse demolishes Impressions Software's reputation for realistic simulation engines that simply don't bother to hide the dry spreadsheet at their core. Visually masterful and filled with cutthroat competition, this game offers continuously exciting play.

TIPS • Industrial sabotage is a very chancy thing, so don't waste your effort on sites where the potential benefit is small. • If you have to let a few contracts slide, allow your competition to grab those offered by fascist and communist governments. These nations are most likely to cause long-term problems. • Always put plenty of money into research and development. If you fall behind there, you may never catch up. • Dirty fuel sources may be cheaper to produce, but the inevitable environmental degradation will give you a bad reputation that's hard to shake.

SimTower
By David Israels

gotta keep those office tenants happy, or they'll move out.

Maxis, publisher of SimTower and all the other "Sim" titles, prides itself on producing more than computer games. Instead, the company claims it creates "software toys." The difference? A toy allows for creativity and free play. At the same time, though, such "toys" don't always deliver the kind of goal-oriented action that gamers expect. But if the runaway success of SimCity and other Maxis simulations are any indication, software toys are here to stay.

The company's latest offering is SimTower, which attempts to simulate the complex world of skyscraper building and management. According to the manual, "You are the owner and the general manager of your building, which you create from nothing, shaping and sculpting it by adding offices here, coffee shops there, until it's a teeming edifice of commerce and intrigue."

Hmm. Sounds intriguing. And at first glance, SimTower's game play seems quite intricate. You work feverishly to balance two competing demands: making your high rise grow and avoiding the deleterious effects of growth on the tower's environment.

The simulation seems deep, too. It tracks the stress level of tower residents, the efficiency of elevators—even the number of customers your restaurants and movie theaters attract on a particular day.

Clicking on stores and restaurants calls up an information window.

But after playing SimTower for a while, you realize there's less here than meets the eye, mostly as a result of an unbalanced design. Too many factors hinge on how well your tower's transportation system works, making the game play more like SimElevator than SimSkyscraper. This imbalance is obvious from the moment you read game designer Yoot Saito's introductory note in the manual, which concentrates on his fascination with elevators, ignoring all other aspects of the game.

Worse, the Maxis folks seem unable to adequately explain proper elevator management. The manual is of lit-

tle use on the subject. And when I spoke with one of the game's producers, he concluded an incomprehensible description of elevator scheduling by advising me to leave the default settings alone.
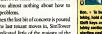
Surprisingly for a Maxis product, the game glosses over important details: The map window doesn't scale, the finance window lops off the last three zeros of some financial data, you can't adjust the level of difficulty, and you can't invoke the disasters that help make SimCity so much fun. Instead, you just have to wait for them.

Nor does SimTower work all that well as a creative toy. It seduces you to follow a single path of "bigger is better." Most players will end up building a huge monolith so they can get a 5-"Tower" rating. And the game's ultimate payoff, the placement of a cathedral, is an annoying bit of religiosity.

The game's graphics are also problematic. They're stunning to look at, but cause the game to run maddeningly slowly—even on a Pentium. Also, unlike Maxis's other Sim games, which give you plenty of information on improving your situation, SimTower offers weak feedback that tells you almost nothing about how to solve problems.

When the last bit of concrete is poured and the last tenant moves in, SimTower has replicated little of the majesty of the soaring structures it claims to model.

SimTower

Maxis
800-526-2947

Platform: Win CD, Windows, Mac
Requires: 386, 4M8 RAM, Windows 3.1, Super VGA
List Price: $39.95

GAME PLAY:	★ ★ ★
GETTING STARTED:	★ ★ ★ ★ ★
GRAPHICS:	★ ★ ★ ★
SOUND CHECK:	★ ★ ★
VALUE:	★ ★

An interesting idea, but an unbalanced simulation and a disappointing game.

"Machine Gun" Lou shows off some of his nifty stick handling.

SPORTS

Virtual Pool

By Christopher Lindquist

Virtual Pool's tutorials give you the basics in a nutshell.

T here's nothing like a friendly game of pool to reduce even the most mild-mannered, intelligent would-be shark to a blue-chalk covered lunatic. I mean, it just looks so easy.

We all know the rules, and they taught us the physics in elementary school. So why is it so hard to put those evil little balls into the holes?

Well, practice does make perfect, but most of us can't turn the den into a pool hall. Interplay to the rescue: Say hello to Virtual Pool, the best little pool game to ever hit a PC.

Virtual Pool is a combination high-tech pool simulator and tutor, complete with video segments on everything from basic shot techniques to multiball trick shots. There's even a video tutorial on the controls used to play Virtual Pool, making the game's manual redundant.

Before you get into the game itself, it's worthwhile—and quite entertaining—

Simple mouse controls give you unlimited views of the table.

to work through the various tutorials. As an added bonus, the Pool Techniques and Trick Shots sections are hosted by former world champion "Machine Gun" Lou Butera. (The section on massé shots is particularly impressive.)

Once you start to play, you have a variety of options. Decide on Straight Pool, 8-ball, 9-ball, or rotation, then choose from single- or multiplayer games (played on one computer, via modem, or on a network). Play against several computer opponents of varying skill levels, from rank amateur to coldblooded shark. You can also go through a practice session, or, if you're feeling your oats, set up some trick shots.

Play is amazingly simple, considering the amount of control you get. You make most shots with combinations of mouse movements and key presses. Press the A key and move the

mouse to aim your cue. Want some English on the ball? Press the E key and move the mouse to position the tip of your cue. It's just as easy to raise and lower the butt of your cue (for massé shots) or change your perspective on the table. You can even turn on the tracking option to see exactly where all the balls will go after you hit them. Want even more help? Hit Alt-K and the computer will line up your best shot.

All this wouldn't mean much if the game didn't look good, but it does. Super VGA graphics provide crisp, 3-D balls that move just like the real thing. Even the sounds will remind you of your last trip to the neighborhood pool hall.

But before you throw in your chalk, know that Virtual Pool is good, but it's not perfect. For starters, the Joplinesque piano soundtrack wears thin pretty quickly, and you can't turn it off without also silencing the wonderful ball and cue sounds. Interplay also should have included some video controls, so you could stop, fast-forward, or rewind to watch some of the more interesting tips and trick shots in more detail. Finally, a playable, preset list of trick shots, such as those demonstrated by Mr. Butera, would have further increased the enjoyment level of Virtual Pool.

Still, don't get me wrong. Virtual Pool is a great example of what a game simulation can be. If you like to rack 'em up, you have to give Virtual Pool a go.

Virtual Pool
Interplay
800-969-4263

Developer: Celeris
Platform: DOS CD
Requires: 386, 2MB RAM, MS-DOS
5.0, VGA, mouse
Street Price: $40

GAME PLAY:	★	★	★	★
GETTING STARTED:	★	★	★	★
GRAPHICS:	★	★	★	★
SOUND CHECK:	★	★	★	★
VALUE:	★	★	★	★

Pool aficionados with PCs should start saving their quarters to bring this one home.

Modus Operandi

You've earned a well-deserved vacation, but that doesn't mean life halts while you watch the swaying palm trees on the island of Morada. Not at all—for the resort is waiting with countless mysteries to be solved.

Morada is the setting for Modus Operandi, a real-time multiplayer game developed by Simutronics and available through the GEnie online service. No, you won't be killing other players or dying in combat with computer-generated secret agents. Modus Operandi may be all about crime, but it's an adventure game, heavy on competition, cooperation, and deduction.

Every player receives monthly wages, but the extra cash from a well-deserved reward comes in very handy. It allows you to buy expensive—and vital—equipment: binoculars, lock-picking kits, even psychic energy readers. What you can use depends in large part on the career choice and skills you initially select. There are eight professions in all, each with certain benefits. An academician can perform detailed library research, while coroners prefer forensic investigations and have unlimited access to laboratory facilities.

A mix of careers and skills is necessary to solve the more advanced mysteries in Modus Operandi. That's where cooperation comes in. Rewards are split by a successful team, and everybody gains status.

Visually speaking, Modus Operandi is a special case—a text adventure. Interacting with the interface is accomplished by typing full sentences or keywords. You won't encounter any figure-out-the-appropriate-word puzzles, however. The text isn't a barrier, but an outline. Simutronics' programmers understand that the best-told story draws your own imagination into the creative process.

As a result, expect to spend long hours in the company of your sleuthful peers, solving the endless mysteries of Modus Operandi.

—Barry Brenesal

Great graphics? No. Great game? Yes!

Marco Polo

Marco Polo isn't quite sure whether it wants to be a game or a historical documentary. I-Motion's CD-ROM uneasily mixes a turn-based strategy game with an exhaustive multimedia history lesson about the great explorer Marco Polo.

The multiplayer game puts you in the role of a 14th-century crusader who embarks upon the Silk Route to make his fortune. You can follow Marco Polo's exact path from city to city while buying and selling goods—and getting involved in political intrigue and undertaking covert missions.

But game play itself is not so exciting: You simply move from a city's introductory screen to town-center and camp screens, and buy and sell goods by clicking on drawings representing each item. You don't move within a simulated environment, nor do you meet any other characters. Your only interactions come in the form of video "encounters." The clips—sometimes featuring Leonard Nimoy and Burt Lancaster from last year's Marco Polo movie—introduce you to townspeople who provide insight about the city.

Aside from the video clips, the rest of the graphics are unspectacular. Static, history book-style drawings make up the game-play screens. The sound track is somewhat better, featuring a variety of period music.

Marco Polo's historical content is accessible by clicking on the Documentation menu item. Watch a narrated slide show of video and photographs or read through screen after screen of text chronicling the life of Marco Polo and the history of the Mongols. That's all fine, but it would have been nice if I-Motion had linked pertinent information here to the game play screens.

Like the explorer's journey, Marco Polo the game is an ambitious idea. Unlike Marco's actual travels, though, this trip is nothing special.

—Christine Grech

Buy and sell goods to make your fortune in the game portion of Marco Polo.

Zig Zag

Legend has it that mythic Polynesian king Hawaii Loa created a challenging test of strength and intelligence for pretenders to his throne. The trial included a trek across sacred grounds, a perilous outrigger voyage, and a treacherous dive in a shark-infested grotto. But the real challenge was a "deduction word game," designed to test the sagacity of royal wannabes. Now Quantum Quality Productions has brought this legendary game to the mainland as Zig Zag.

Zig Zag is a word game in the true sense of the, well, word. Don't look for fancy graphics in the six word "quests." In fact, the graphics are simplistic even by word-game standards.

To win, you must discover a secret word by carefully entering test words in crossword puzzle-like spaces. After

Words—not fancy graphics—make the game in Zig Zag.

entering each test word, you deduce which letters are also in the secret word by seeing if you score any points. This is where the "zig" and "zag" come in. To garner a zag and 250 points, a letter in your test word must also be in the secret word. For a zig worth 1,000 points, a matching letter must also have the same placement in the two words. For example, if the secret word is B-E-A-T and you type B-E in a two letter word space, you earn 2,000 smackers. It isn't easy. As you progress to higher difficulty levels, the secret words become things like "Cays," "baboos," and "acetyls."

If it all sounds a little complicated, it is. But once you get the hang of things, Zig Zag is both challenging and fun. To help you out, the manual is easy to understand, and the disc includes three full-length game examples. If you're completely baffled, the hint feature can give you the word letter by letter. Of course, it also eliminates your chance to reign on the high-score list.

Wordsmiths and others who enjoyed the verbal portion of the SATs should love Zig Zag. It may not include a lot of bells and whistles, but it'll keep you guessing.   —*Bill Meyer*

Zig Zag
American Laser Games
800-863-4263

Developer: Quantum Quality Productions
Platform: Mac/Win CD
Requires: System 6.0.8, 2.5MB RAM
Street Price: $49.95

GAME PLAY:	★ ★ ★ ★ ★
GETTING STARTED:	★ ★ ★ ★ ★
GRAPHICS:	★ ★ ★
SOUND CHECK:	★ ★ ★
VALUE:	★ ★ ★

GAME

Dark Forces/Doom II For the Mac

As good a game as Marathon is, it hasn't quite assuaged Macintosh owners' PC envy as they cast longing eyes on first-person, three-dimensional shooting games like Doom II and Dark Forces. Well, pine away no longer, Mac fans: These high-octane megahits are now available for you.

In case you've been living in a cave, Doom II: Hell on Earth pits players against hordes of demons spawned in the darkest pits of Hell. The Star Wars-based Dark Forces has a tamer but more complex plot: You are a mercenary hired by the Rebellion to expose and destroy the Empire's newest secret weapon, the Dark Troopers. Either way, you run around various levels of mazes, blasting away at everything that moves.

While the Mac versions of each game mimic their PC predecessors in nearly every way, there are a few small graphical differences. For instance, the images of ships shown during Dark Forces' mission-loading screens become razor-sharp on the Mac. And gamers lucky enough to own a Power Mac can view all the Dark Forces action in high-resolution graphics. Similarly, Doom II on the Mac makes it a bit easier to discern enemies from long distances.

Of course, the slightly sweeter eye candy would leave a bitter aftertaste if performance wasn't up to snuff. Fortunately, in both cases it is. While Dark Forces runs noticeably smoother in full-screen mode on a 486DX2/66, performance on a Mac Quadra 630 is more than acceptable. And Doom II's performance on the Mac matches the PC version shot for shot. As an added bonus, Doom II supports network play among Macs and PCs.

In the nit-picking category, moving to the Mac messed up the default keyboard controls on both games. For example, the D key fires weapons in Doom II on the Mac, whereas the easier-to-reach Ctrl key acts as the trigger on a PC. Each game gives players the option to custom-configure key settings, but because some Mac keys are restricted to certain functions, it's difficult to precisely recreate the PC control sets.

Nevertheless, it's time for the Mac users to cock the chain gun and air out the blaster. The new versions of these instant classics will make Doomheads and Dark-Forcers out of the rest of us. —Steve Klett

Dark Forces
LucasArts Entertainment
800-782-7927

Platform: Mac CD
Requires: 68040 or PowerPC, 8MB RAM, System 7.1, 256-color monitor
Street Price: $54.95

GAME PLAY:	★	★	★	★	★
GETTING STARTED:	★	★	★	★	
GRAPHICS:	★	★	★	★	★
SOUND CHECK:	★	★	★	★	
VALUE:	★	★	★	★	★

The Mac version of LucasArts' classic just gets better, especially for Power Mac owners.

Doom II
GT Interactive
800-332-4300

Developer: id Software/Lion Entertainment
Platform: Mac CD
Requires: 68040 or PowerPC, System 7.1, 8MB RAM
Street Price: $55

GAME PLAY:	★	★	★	★	★
GETTING STARTED:	★	★	★	★	
GRAPHICS:	★	★	★	★	★
SOUND CHECK:	★	★	★	★	
VALUE:	★	★	★	★	★

Long-time Doomers won't notice much difference, but Mac players can finally get in on the fun.

Terminal Velocity

Does Descent leave you feeling claustrophobic? Do typical flight sims have you wishing for something simpler? Maybe it's time to hit Terminal Velocity.

In "TV"—as the first game from 3D Realms, a new division of PC action-meister Apogee, is affectionately known—you play a pilot in a distant future fighting impossible odds, trying to save...oh, enough of that already. Once you enter the cockpit, things couldn't be simpler—just fly and shoot. A navigational arrow in the center of your radar screen tells you where to find your next target, while the screen itself shows the enemies around you.

As you fly, you can take out a variety of air- and ground-based targets. Destroying certain enemies yields valuable power-ups, such as shield restoratives and afterburners. And if you miss that closed-in feeling, just dive into a tunnel. The moving walls and myriad enemies should keep even Descentophiles more than happy.

The game's a looker, too. If you've got a Pentium, turn on all the details and the action will still fly smoothly by. It isn't Super VGA, but it sure looks great. Got 12MB of RAM? Then load up the registered version's high-res bitmaps for even more detail. The explosions are especially inspired, both visually and audibly.

But in action games like this, fun is the object, and Terminal Velocity is a barrel of that stuff. You can even hook up with other players across a network or modem to add that human touch. Once you give the shareware version a spin, just *try* not to immediately order the full commercial version. Even Microsoft is getting into the act; it will release a Windows 3.1/95 game called Fury[3] based on the same engine this fall.

But why wait? Terminal Velocity is here now.
—Christopher Lindquist

CHEATS

Type any of the following to give yourself a bit of a boost:

trigods—Invincible
frishld—Shield
trimext—Next level
tanlacs—Afterburner

Terminal Velocity
3D Realms
800-337-3256

Platform: DOS CD, DOS
Requires: 486/66, 8MB RAM, VGA
Registered Price: DOS, $29.95; DOS CD, $39.95

GAME PLAY:	★	★	★	★	★
GETTING STARTED:	★	★	★	★	
GRAPHICS:	★	★	★	★	★
SOUND CHECK:	★	★	★	★	
VALUE:	★	★	★	★	★

A winner in every way, Terminal Velocity is shareware that stands out.

Feeling homesick for Descent? Terminal Velocity gives you tunnels to play in, too.

GAMES

Onslaught

Computerized versions of hex-map war games have long been a staple on the PC. Now startup Frontal Assaultware brings some of the fun to Mac-based strategy gamers.

Onslaught contains all the elements of a good strategy game: 17 troop types, including infantry, armor, and airplanes; a dozen different terrains; numerous orders for your troops to follow; even nukes, if you feel like leveling the board to an uninhabitable pile of radioactive waste.

To play, you choose the starting conditions, such as percentage of terrain types, land mass size, number of neutral countries, and the strength of the local economy. You can't set "skill levels" for your computer opponent, but beginners can delay the enemy's deployment or reduce the size of its war chest if the action proves too fierce.

After setting up the options, Onslaught generates a random game map for you to fight over, and the action begins. Create your forces with the point-and-click Build Palette, then place them on the colorful map. Check unit status and assign orders with easy-to-use pop-up menus and the Info Palette. Once fighting begins, use the Combat Report window to track your successes and failures.

But while Onslaught is certainly a slick little war game, it still has a ways to go to reach the level of the best PC strategy titles, such as Panzer General from Strategic Simulations or The Perfect General II from QQP. Unit movement consists mostly of watching unit tokens dance around the screen to the repetitive strains of machine-gun fire and bomb blasts. Onslaught could also use more variety in the number and types of troops.

At least Frontal Assaultware seems aware that Onslaught is only a first attempt. The designer's notes even ask players to suggest improvements. One thing's for sure: Onslaught gives the company a solid base from which to work.

—Christopher Lindquist

Onslaught brings traditional board game-style war gaming to the Mac.

Onslaught
Frontal Assaultware
800-442-2805

Platform: Mac
Requires: 68020, System 7.1, 4MB RAM
Street Price: $40

GAME PLAY:	★ ★ ★	
GETTING STARTED:	★ ★ ★ ★	
GRAPHICS:	★ ★ ★	
SOUND CHECK:	★ ★	
VALUE:	★ ★ ★	

CD CONSOLE

Crystal pyramids equal icy death in Icebreaker.

The Big Game, the Big Fight, and...Alex Trebek?

By Peter Olafson

Space Hulk for 3DO brings out the inner action game.

Come on back to the ballpark, folks. Greatest Nine, the first Saturn baseball game, is a windshield-breaking homer, with a raft of great features, beguiling ease of use, and an authentic feel that even the best computer games are hard-pressed to match.

The game has an engaging eye for detail—whether it's the range of apoplectic announcers, the precision with which it calculates the length of home runs, or the way outfielders look over their shoulders and lean into the stands when chasing flies.

That said, you will probably want to wait for the U.S. issue, World Series Baseball, in time for the holidays. The original is based on real-life Japanese baseball, with its own players, announcers, and smaller stadiums. If you're not careful, you may find yourself getting thrown out at first on an erstwhile single to right. (Sega of America; 800-872-7342; street price $70 to $90 for import version, U.S version, $59.99)

Platform: Saturn
Rating: ★ ★ ★ ★ ⯨

Electronic Arts has done right by Space Hulk in bringing it to the 3DO. The new version celebrates the original's inner action game. This ground-up rewrite of the computer version sends your multicharacter parties free-scrolling through darkened derelict spaceships in search of nightmarish monsters and the odd artifact. The 3DO disc does a better job of linking the action and strategy elements, so that

each now seems an extension of the other. The result is like multiplayer Doom without the network. And while the weird religiosity of the computer versions has thankfully been excised, the Genestealers, bless 'em, are more horrifying than ever. Wear a smock. (Electronic Arts; 800-245-4525; $59.95)

Platform: 3DO
Rating: ★ ★ ★ ★

Worldwide Soccer for the Saturn squats happily a step or two down the ladder from EA's FIFA International Soccer for 3DO. It's missing something intangible at a visceral level—perhaps just FIFA's irrepressible high spirits. But it remains competitive, flexible, and feature-filled. (Sega of America; 800-872-7342; $49.99)

Platform: Saturn
Rating: ★ ★ ★ ★

The key to the new generation of polygonal 3-D fighting games is realistic action—not the trauma-unit gore of Mortal Kombat. In this respect, each of

the Big Three consoles seems missing a little something. For instance, Tekken is utterly gorgeous and wonderfully fluid, but it's sometimes less like fighting and more like coming to terms with a "boss" gimmick. (Namco; 408-922-0712; $70 to $90 for import version)

Platform: PlayStation
Rating: ★ ★ ★ ⯨

Meanwhile, Toh Shin Den uses modeled characters and permits lateral movement—meaning you can sidestep an attack—but replaces the human touch with magic and swords. Consequently, you never feel entirely involved. (Takara; 212-689-1212; $70 to $90 for import version)

Platform: PlayStation
Rating: ★ ★ ★

By contrast, Virtua Fighter looks a bit crude—the large polygons give it a sort of Rock 'em Sock 'em Robots feel—but it's a real fighting game. It never tries to be anything else, and the game play mirrors the coin-op almost perfectly.

Toh Shin Den adds a magic touch.

Virtua Fighter just keeps on kicking.

Venezie

Tekken takes a stand for fighting games.

(Sega of America; 800-872-7342; free with purchase of Saturn)

Platform: Saturn
Rating: ✳ ✳ ✳ ✳

....

In the next six months, you'll probably see around a dozen games in the style of *Gran Chaser*—a texture-mapped racing game from Syd Mead, the creator of CyberRace. It's not a bad start: The graphics are pretty, the frame rate adequate, the courses rigorous, and steering-sensitive enough to keep you alert. But for all that, the game lacks personality. You see the other cars, but there's no sense of having anyone else racing with you. (Sega; 800-872-7342; street price $70-90 for import version)

Platform: Saturn
Rating: ✳ ✳ ✳

....

Syndicate for 3DO is an uncharacteristically straightforward port of Bullfrog's justly celebrated action/strategy computer game. You conduct teams of as many as four agents on missions through isometric cityscapes. You then need to manage captured territories to extract the most cash without inciting rebellion. However, Syndicate 3DO has not been improved so much as adjusted to work with a joypad. No indoor view is provided, and movement within buildings remains a strange game of blind man's bluff. (Electronic Arts; 800-245-4525; $59.95)

Platform: 3DO
Rating: ✳ ✳ ✳

....

Simplicity: Ya gotta love it. In *Ice-breaker*, you're trying to clear a play field forested with colored pyramids. The blue shatter at a touch, the red are destroyed by your gun (but contact is deadly), and the green can be demolished only by luring predatory yellow pyramids into them. Purple ones turn into pits when shot, and it goes on from there. A breeze to learn, a joy to play, and truly wicked in the higher levels. (Panasonic Software; 800-653-1898; $49.95)

Platform: 3DO
Rating: ✳ ✳ ✳

....

In Interplay's upgraded platformer, *Earthworm Jim: Special Edition*, you control a worm incarnated, by turns, either as a muscleman or as—well, bait. This game's play sensibility is delightfully off-center. The game keeps you in motion and manages to avoid repeating itself: The levels are full of surprises, not to mention infuriatingly out-of-reach side roads. (Interplay; 800-969-4263; $59.95)

Platform: Sega CD
Rating: ✳ ✳ ✳ ✦

....

Surgical Strike for Sega CD is a full-motion-video shoot-'em-up with a little less twitch in its pitch. It offers a measure of user control (you direct your hovercraft through a range of labyrinths), apocalyptic explosions, and a certain strategic element. But if you've seen a dozen apocalyptic explosions, you've seen 'em all, and monotony sets in after a while. (Sega; 800-872-7342; $59.99)

Platform: Sega CD and 32X CD
Rating: ✳ ✳ ✦

....

Fahrenheit uses an engine similar to Surgical Strike, but to much more creative effect. Here, you're a fire department rescue specialist sent into three elaborate hot zones: suburban house, apartment building, and university. You'll deal with red-hot herrings (an empty gas can) and interesting side issues (finding the kerosene heater and saving the cat), and you'll have to make occasional strategic decisions—such as deciding which handle turns off the gas. (Sega; 800-872-7342; $59.99)

Platform: Sega CD and 32X CD
Rating: ✳ ✳ ✳ ✦

....

It's been a long time coming, but we finally have a good platformer for CD-i. *Merlin's Apprentice* is a gorgeous bouncer whose childish characters seem oddly matched to the undraped women who sometimes adorn the backdrops. (Philips; 800-340-7888; $49.98)

Platform: CD-i
Rating: ✳ ✳ ✳

....

Most game-show-based games come off flat for the want of personality. Not *Jeopardy*. It's got Alex himself, a classy veneer, and an overall feel close to the real thing—especially when playing with a bunch of people. The only thing missing is the grease pencils and the host's grim attempts to ask the contestants about their jobs. (Philips, 800-340-7888; $39.98)

Platform: CD-i with Digital Video Cartridge
Rating: ✳ ✳ ✳ ✦

By Christopher Lindquist

Plain TV? Play TV!

So you finally got that big-screen TV you always wanted. And it's attached to a gut-pumping sound system that makes the soundtrack to *Pulp Fiction* turn your head inside-out. All you have to do is sink into the couch and relax. Awesome, ain't it?

Then there's that PC in the den: Puny 14-inch monitor. Dinky, tiny speakers. And the most uncomfortable chair in the house. But somehow, you seem to spend most of your time playing with the PC instead of watching that tower of multimedia power in the living room.

Well, you don't have to choose—or sacrifice comfort—anymore. Several companies now build "scan converters" that turn your PC's video output into something you can display on your TV set (see "PC on the TV," July 1995, page 90). These handy devices don't necessarily cost a lot, either: You can pick up the least expensive ones for less than $50 on the street.

You'll find scan converters that cost more, too, since they are available in a range of models that offer different levels of features. Most makers sell a line of both internal and external units, ranging from basic gamer-oriented boxes to high-end business presentation versions costing $250 or more.

On the surface, it may be hard to tell the various scan converters apart. They all come with everything you need to hook up your PC to a TV set with S-Video (the best-looking choice) or Composite (RCA jack) connectors. (If your TV supports only the RF inputs, those threaded connectors to which you attach your cable-TV

cable, you'll need to buy an RCA-to-RF modulator at the local electronics store.) The scan converters also come with all the cables you need to hook up both your VGA monitor and TV set to the PC at the same time. That way, if your converter supports it, you can see what you're playing on both screens. External scan converters also include an AC-adapter to power the unit.

Most scan converters also include utilities to move and resize the image you see on the television. VGA monitors and TV sets don't use exactly the same resolution, so some computer images may get cropped off on the TV screen. These utilities let you reposition the image to keep important information, such as menu bars, where you can see it.

The more expensive converters may also incorporate flicker-reduction techniques. This can save some strain on your eyes if you play for extended periods of time. But be warned that even the best scan converter won't make your TV set's image look as good as the one on your monitor. DOS and Windows text may be especially hard to read, though some converter makers supply software to help make things more legible.

One final word of advice: Buy your scan converter at a store with a good return policy. Many converters require special software drivers that let you display an image on the TV, and there's a small chance that the software won't work with your PC's particular video card.

Now that you know the basics, take a look at these four new gaming-oriented converters: Advanced Digital Systems' Game Zapper, AlTech GamePlayer TV, Antec TVator Pro, and SIIG TV Gamer Plus. Buy one and say good-bye to small-time games forever.

Game Zapper

On the low end of the price scale, you'll find the Advanced Digital Systems (ADS) Game Zapper. This no-frills converter supports only 640-by-

480 resolution in 256 colors, so games or multimedia titles that run in more colors—particularly Windows titles—won't work with the Game Zapper; you'll face a blank screen. But for most DOS-based games, including the bundled shareware version of Heretic, the Game Zapper is just fine.

If you do run Windows, don't expect much. Game Zapper doesn't include Windows-specific drivers, so text can be fuzzy and unreadable. Also, unlike most scan converters, the Game Zapper doesn't let you watch both the TV and the VGA monitor at the same time. Instead, you have to toggle between modes. So if an important piece of text is unreadable on the TV, you have to switch to monitor mode in order to get

a clearer view. Unfortunately, Game Zapper also warns that switching modes while playing a game "may cause problems."

The Game Zapper's overall display quality isn't bad, considering the price. Screen flicker is quite noticeable, however, particularly on slow-moving games.

ADS also makes higher-end converters, including the TV Elite, which sells for between $199 and $229. But if you want to play computer games on the tube and can't afford more than $50, Game Zapper is the only game in town. (Advanced Digital Systems; 800-888-5244; street price $50)

Rating: ✶ ✶ ✶

GamePlayer TV

Like other converter makers, AiTech offers a complete line of models, from the $300 MultiPro CTV, which includes such niceties as hardware controls for screen size and centering, down to the $109 GamePlayer TV.

The GamePlayer TV is a standard PC expansion card that fits in an open ISA bus slot. That may turn off people who don't like crawling around under the hood of their computers. But its design lets the GamePlayer TV draw power directly from your PC—no need to worry about AC adapters or finding another power outlet.

While the GamePlayer TV costs more (more than three times as much) than the Game Zapper, it offers such added features as flicker reduction, support for 16.7 million colors, Windows drivers, and utilities to adjust the size and position of DOS and Windows screens. The GamePlayer TV also lets you play games on your TV and VGA monitor simultaneously. Even better, if you plan to play games only, you don't have to load any potentially troublesome drivers at all. Just plug in the card, attach it to your VGA card's output port, and play away.

Under DOS, the GamePlayer TV offers better picture quality than the Game Zapper, and it outperformed all the competition under Windows. Even Program Manager group names were clearly legible. You can reduce DOS screen flicker by hitting a hot-key combination, but that also seems to degrade text and graphics quality a bit. All in all, the GamePlayer TV isn't a bad deal for gamers looking to hit the big screen. (AiTech; 800-882-8184; PC; street price $109)

Rating: ✶ ✶ ✶ ✶

TVator Pro

If you like Macs as well as PCs, take a look at Antec's TVator Pro. This scan converter supports both PC and Mac modes and comes with all the necessary connectors and software drivers for both platforms.

Like the GamePlayer TV, The TVator Pro can display up to 16.7 million colors. It also includes utilities to both resize and adjust the brightness of the screen. Plus, the TVator Pro includes a flicker-reduction filter to help reduce screen flicker. Like the GamePlayer TV, you can also view both your TV screen and your VGA monitor at the same time. However, unlike the GamePlayer TV, you can't turn the flicker reduction on and off.

In terms of picture quality, the TVator Pro easily matches the GamePlayer TV and tops the Game Zapper, especially under Windows. Images, particularly static ones, look clearer, with less flicker. However, there's nothing too static about trying to escape from an exploding mine in Descent, so you may not notice much difference during an intense game.

However, TVator Pro requires a device driver to let you see the picture on the TV, and—under Windows—that driver is incompatible with some modes of a few graphics cards, including some Diamond Speed Star cards. Still, Mac users especially should keep the TVator Pro in mind. (Antec; 510-770-1200; PC/Mac; street price $149-$199)

Rating: ✶ ✶ ✶

TV Gamer Plus

SIIG's TV Gamer Plus topped the list for the external models that we looked at. It boasts good flicker-reduction technology, crisp Windows support for 16.7 million colors, and an outstanding 5-year warranty (the others offer only one-year deals).

Like the other external converters, the TV Gamer Plus connects your PC to both the TV and VGA monitor. It also lets you view both the monitor and set at the same time while playing. And like the TVator Pro, you must load a special device driver to see a picture on your TV screen. The driver should work with the vast majority of cards on the market, but be warned that you could run into a problem. The unit's picture quality is also on par with the other higher-price units, with quite clear DOS text and usable Windows text.

TV Gamer Plus also comes with software utilities for changing DOS fonts to make text more readable, turning flicker reduction on and off, and moving and resizing the screen. As an added bonus, SIIG throws in a CD-ROM containing hundreds of shareware and freeware games. Mac users can pick up a version of the TV Gamer for their machines for just $10 more. (SIIG; 510-657-8688; PC; street price $169.99; Mac, street price $179.99)

Rating: ✶ ✶ ✶ ✶

By Donald St. John

Untangling the World Wide Web

YOUR COMPUTER

HTML

SLIP/PPP

Perhaps no recent technological development seems as totally magical as the World Wide Web. Consider: You can open your browser and go to a Web page that's located on a computer in California, for example, click on a link within that page, and be (almost) instantly whisked off to another page that may be on a computer in Australia, halfway around the world. Just…like…that.

Of course, it's not quite *that* simple. What makes the Web so easy to use is the same quality that lets you make a telephone call without thinking about it—the transparency of the technology. But just as that phone call has to be routed through computers, switches, and a mammoth set of wires that you never see, the Web also works in the background, enabling you to get to where you want to go next. How does it all happen?

Blame it on the Internet

It all starts with the ingenious design of the Internet, that collection of computers and networks interconnected across the planet. No matter what programs you're using to access the Internet—and World Wide Web browsers are just one type of the many that flow along the Internet's pathways—the open structure and software of the 'Net pretty much ensure that what you send and receive gets to where it's supposed to go.

In part, that's because the Internet is the ultimate example of the success of client/server technology, a term you often hear associated with large corporate networks. Simply put, a client—a stand-alone computer running software that either requests or transmits information—finds a server, a computer that contains the information or acts as a routing agent to

other servers that do. To accomplish this task, all the servers have to speak the same languages. The two languages that are a basic prerequisite to any Web transaction are Unix, the operating system on which the Internet was built by the U.S. military in the 1960s, and Hyper Text Markup Language (HTML), the scripting language in which most Web documents are written. Both were devised with one primary thought in mind: openness. Because neither has ever been dependent on working with proprietary hardware or software, such as Apple's Macintosh operating system or Microsoft's Windows, any computer can use them—which theoretically means that any computer can access the Internet.

Does that mean that you have to run Unix on your computer to get on the Web? Not any more. If that was the case, the Internet would still be the sole province of the scientists and engineers who comprised its population 10 years ago. Since that time, though, a cottage industry—and now a commercial one—has sprung up in software that does Unix translations behind the scenes for you.

Meanwhile, HTML was devised as a language that could allow transparent hyperlinking to text or graphical objects, while simultaneously being pretty simple to write. This ease of use lets thousands of college students and other regular Joes create their own cool Web pages. The beauty of HTML is that you can create a link to another Web page and represent it as a graphical object; click on the picture, and your browser software makes the connection and takes you to it.

Just Browsing

But before you program in HTML, you have to get on the Web. To do that, you need an Internet provider—a company with computers

connected to the "backbone" network that was established by the military a quarter-century ago. At the heart of that backbone are large computers, scattered throughout the world and primarily located at universities, that act as the primary servers for the whole Internet. (The military designed the system to be able to withstand nuclear attack on a particular site, so the system doesn't depend on the operation of any single installation.)

Your provider, whether it's a small stand-alone Internet services provider (ISP) or one of the big commercial online services such as CompuServe, AOL, or Prodigy, must understand TCP/IP (Transmission Control Protocol/Internet Protocol), the agreed-upon way for Internet computers to communicate. (For more on Internet connection options see "Get the 'Net," April 1995, page 40). Your computer in turn also needs to understand TCP/IP, so you'll need to have TCP/IP software such as Winsock for the DOS world or MacTCP for the Macintosh, which are generally available as freeware (or, in the case of MacTCP, bundled into the Mac's System 7.5 operating system).

If you want to view the Web in its full glory, your machine also needs to have either Point-to-Point Protocol (PPP) or Serial Line Internet Protocol (SLIP) connections, which handle the movement of all that multimedia data. Fortunately, most PPP and SLIP applications exist as freeware or shareware and can be found bundled in any of several guides to the Internet, such as the *Internet Starter Kit* by Adam C. Engst (Hayden Books, $29.95). If you're not up to installing all this software on

WEB PAGE

breakthrough in browsers came in 1991 when the National Center for Supercomputing Applications developed Mosaic, the first good graphical browser. More recently, Mosaic developer Marc Andreesen co-founded Netscape and developed the Netscape Navigator, which is now used by roughly 70 percent of all Web surfers. The browser, in tandem with a growing number of "helper" applications such as sound package RealAudio or videoconferencing software CU-SeeMe, is what physically puts you onto the Web.

The Last Protocol

To finally get on the Web, there's one more protocol to deal with—Hyper Text Transfer Protocol, or HTTP. Fortunately, browsers are developed to read HTTP effortlessly; all you ever need to do is to start your request to go to a page with the signal "http://", then type in the Web address of the page you seek. Your request transmits to your Internet services provider's host computers; those seek out routing servers that can find the page you need; and the computer holding the page data sends it back. Just…like…that.

TCP/IP

WEB SERVER

Web Page

Web Page

Web Page

your machine, the browsers that have been developed by the commercial online services can handle the task for you— at the expense of some flexibility on your end. (For more on what the commercial online services offer, see "Cyberspace: 1995" on page 47.)

Once these programs are installed, you need one more crucial piece of software: a Web browser. This is software that sits on your machine, hooks into your SLIP or PPP connection, and translates the text and graphical information that comes across your Internet connection. The

S.O.S.

Lefties squeezed, modem speeds, and standards seized.

Lefties Left Out

I recently looked into buying a new joystick. I was discouraged to discover that Logitech's Wingman Extreme does not come in a left-handed version. I was wondering if they make any of the really good joysticks for left-handed people. I've seen yokes for both hands, and I have a CH Products Flightstick, which works great, but I would like something more.
Rylan Juran
Shoreview, MN

Wish I had some good news for you, but like many industries, joystick makers pretty much overlook lefties.

The reasons are economic, as usual. The molds used to create high-end joysticks, such as the Thrustmaster FCS, Advanced Gravis Phoenix, or Wingman Extreme, are expensive. Creating new molds and starting additional manufacturing runs just to produce a few left-handed joysticks doesn't make financial sense. So the lefties of the world have to go for an ambidextrous model such as your Flightstick or learn to deal with a right-handed joystick. (It's possible. Hey, Jimi Hendrix was a southpaw who learned to play right-handed guitar—and better than anyone before or since.)

That doesn't mean you don't have any options. If you're a serious flight-sim pilot, you may want to investigate CH Products' two-handed Virtual Pilot flight yoke (CH Products; 800-624-5804; PC, $109.95). If you're looking for ThrustMaster compatibility, try out the ThrustMaster XL Action Controller. Its four fire buttons and "hat" control work with all ThrustMaster FCS-compatible games, and while it's not built to handle serious abuse, the $29.95 price sure makes it appealing. (ThrustMaster; 503-639-3200; PC, $29.95)

If sports and action games are your forte, definitely scan the shelves for Advanced Gravis' PC Gamepad. Not only does it have a switch that lets you swap between left- and right-handed modes, but its four control buttons are finding increasing support in such games as EA Sports NBA Live '95 and Accolade's Brett Hull Hockey '95. (Advanced Gravis; 800-663-8558; PC, $29.95)

Need for Speed

I'm looking to buy a new modem to replace my antique 2,400 bps model. Is it really worth my while to get one of the V.34 28.8-Kbps models, or can I save some money and just get a cheaper 14.4 Kbps version? Right now I use my modem just for e-mail and downloading a file every so often, but I might want to get into online gaming later on.
Tim Oulet
Portsmouth, NH

In financial terms alone, heavy online users almost always come out on top by buying a faster modem (faster modems usually cost around $100 more). Faster downloads and speedier Web browsing can mean shorter sessions and smaller phone bills. And that means happier spouses and bigger bank accounts. Also, while not all online providers now offer local 28.8 Kbps lines in all areas, most will be upgrading to the faster modems pretty quickly.

More importantly, a faster modem makes going online more fun. Once you see just how much faster things arrive to your PC, you may actually enjoy the experience so much more that you spend more time online than ever before: playing online games, browsing the World Wide Web, and downloading files. But trust me, it's a worthwhile risk.

There is one other consideration—phone lines. 28.8 Kbps is actually faster than some people believed today's analog lines could handle. Those people were proven wrong in the end, but even a bit of line noise can quickly reduce your speed to 14.4 Kbps or less. If you live in an area with traditionally noisy lines, you may never see the benefit of that extra performance.

PC or MPC?

A bunch of the PCs in my local computer store say they're MPC2-compatible. I found out that means they have a double-speed CD-ROM drive, 4MB of RAM, plus some other stuff. Now that we have quad-speed drives and even faster computers, will there be an MPC3 standard?
Mark Chin
San Francisco, CA

Yep, there is already such a thing as MPC3. It was established this past June by the Multimedia PC Working Group, a gaggle of computer and software makers who get together every so often to try and bring some sanity to the multimedia PC market.

For your PC to be MPC3, it has to include at least the following:
1) 75MHz Pentium
2) Quad-speed CD-ROM drive
3) Support for MPEG1 and other full-motion video standards
4) 8MB RAM
5) Wavetable sound
6) A 540MB hard drive

So, if you don't match up to these standards, you're out of touch and should go buy whatever it takes to catch up.

Just kidding.

In reality, the standard doesn't do much except give hardware and software makers a baseline to aim for on future machines. The

software makers will have an easier time knowing what machines will be on the market if they know that the hardware guys are going to start aiming for MPC3 over the next few months. But it's not a solid "standard" in the way that, say, PCI is a bus standard that everyone needs to follow to the letter in order for their add-on cards to work. It's more like a suggestion that the Group hopes will make everyone's life easier.

The only standards that really count are your own. If your PC still runs the games you like to play with acceptable performance, don't worry about what some gang of vendors will try and sell you next.

286 or Bust

I've got an old 286 that's ready for retirement. Should I upgrade this system or buy a whole new computer?

Roger Mayweather
Indianapolis, IN

Send that 286 to the old computer's home. While you could upgrade it to a 486 or Pentium, you probably won't be able to salvage much. The memory, hard drives, and add-in cards (like graphics boards and drive controllers) used in those older systems are generally slow by today's standards and not worth installing in a newer machine. (Unless you have a V.34 modem or some hot new sound card in there. Save that for sure.)

A new machine will have components designed to work with the newer high-speed processors. You'll be happier in the long run—believe me.

But don't just throw that 286 away. Consider giving it to a local charity or school. They can sometimes use even outdated machines for training and educational purposes. You might even be able to get a receipt you can take off your taxes next April.

Fax, mail, or e-mail your queries to the S.O.S. staff at:

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MARKETPLACE

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Finishing Moves

What's on Johnny Mnemonic's Mind?

A Top 10 list of the info that might have been stored on that memory chip planted in Johnny's brain.

10. Much Ado About Nothing
9. Microsoft BOB
8. The *real* specs for the Sony PlayStation and Sega Saturn
7. The active ingredients in Flintstones Vitamins
6. The script for the 1998 sitcom pilot *DudeWatch*
5. A detailed City of Los Angeles bus-repair invoice
4. A list of Mortal Kombat III cheats
3. The Screen Actors' Guild job-hotline number
2. Transcripts of the O.J. trial
1. The recipe for McDonald's secret sauce

Online Classics

What would the classics of literature have looked like if the great writers had used emoticons? (If you need some help identifying the works, the words we replaced appear in order at the bottom.)

It was the :-) of times. It was the :-(of times.
—*A Tale of Two Cities*, Charles Dickens, 1859

:-) families are all alike, every :-(family is :-(in its own way.
—*Anna Karenina*, Leo Tolstoy, 1876

What's in a name? That which we call a @>-}-`:-)—
By any other name would smell as :-)
—*Romeo and Juliet*, William Shakespeare, 1595

Then from 5K throats and more, there @>-}-`:-)— a lusty :-O;
It rumbled through the Λ**Λ, it rattled in the dell;
It knocked upon the Λ and recoiled upon the ____,
For Casey, mighty Casey, was ——> to the bat.
—*Casey at the Bat, A Ballad of the Republic*, Ernest Lawrence Thayer, 1888

Raskolnikov suddenly recalled Sonia's words,
"Go to the X roads, bow down and :-* the earth,
for u have sinned against it 2,
and say aloud to the whole world, `<—— am a murderer.'"
—*Crime and Punishment*, Fyodor Dostoyevsky, 1866

(cross, kiss, you, too, I)
(happy, unhappy, unhappy)
(rose, struck)
(best, worst)

Computer Games Based on the Fall TV Season

Every fall, the networks roll out a slew of new TV series. With the rise in computer-game popularity, we figured that many new shows deserve interactive spinoffs.

The Show

A Single Guy (NBC) Jonathan Silverman stars as a man whose pals are all now married, so he sets out to find the perfect mate.

Cabin Pressure (FOX) Sitcom about wacky flight attendants who live in New York.

Can't Hurry Love (CBS) Nancy McKeon stars as a single woman looking for love.

Central Park West (CBS) Contemporary soap from the creator of *Beverly Hills, 90210*, set in Manhattan and starring Mariel Hemingway.

John Grisham's The Client (CBS) JoBeth Williams takes over for the movie's Susan Sarandon as an Atlanta attorney who specializes in family law.

Dweebs (CBS) Sitcom starring Farrah Forkke (*Wings*) and Peter Scolari (*Newhart*) working at a computer company staffed by nerds.

The Game

A Single Guy A knock-off of Virtual Vegas, this raunchy role-playing game finds Jonny-boy losing his life savings as he looks for love in all the wrong places.

Coffee, Tea, or Modem First-person flight-attendant sim. Learn to pour drinks, grab pillows, serve reconstituted chow, and squelch pinchers at 30,000 feet.

Can't Hurry Love Oh yes you can, and you *must* if you want to beat the biological clock in this adventure game/puzzler.

Central Park West Your goal in this fast-action adventure game is to make it from B.H. to C.P.W. while avoiding all traces of reality.

The Server This high-stakes game lets you join up with a networked legal team delivering virtual subpoenas across the nation.

Dweebs Wait a minute. Computer games are substitutes for this kind of life. Without robots, elves, or cyber-babes, why bother?

After hearing his favorite games on a Sound Blaster, Vincent regretted the ear thing.

Sound Blaster 32 Now Available

Inferior sound cards can drive you to some crazy ends. All of the awesome sound effects that are built into this year's hottest new games sound muffled and flat. So it feels like you're only getting half the experience.
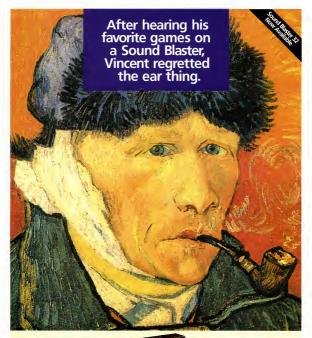
But a Sound Blaster AWE32 sound card can spare you that insanity. You get only the best 16-bit, CD-quality audio. And suddenly, games come to life. That's because it uses Advanced WaveEffects, SoundFont technology,

and a digital signal processor to do some really cool stuff. Like deliver 3-D wrap-around sound, plug into musical instruments, and create samples of your own recorded sounds.

And of course, the AWE32 belongs to the Sound Blaster family—the PC sound standard. It's the audio card that satisfies the most discerning ear. Ask for the AWE32 at your nearest Creative Labs dealer, or call 1-800-998-5227 Ext. 114.

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